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Self-evaluation of School of Agriculture as regards: Objectives of various divisions; evidence of stability (including data on enrollments and faculty turnover); finance; plant; materials and equipment; library; records and reports; curriculum; faculty background; organization, meetings and committees; teaching load; programs for improvement of instruction; and selection of administrative personnel.

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Self Evaluation Report II

School of Agriculture

January 1960

OREGON STATE COLLEGE
Corvallis, Oregon

IV-20

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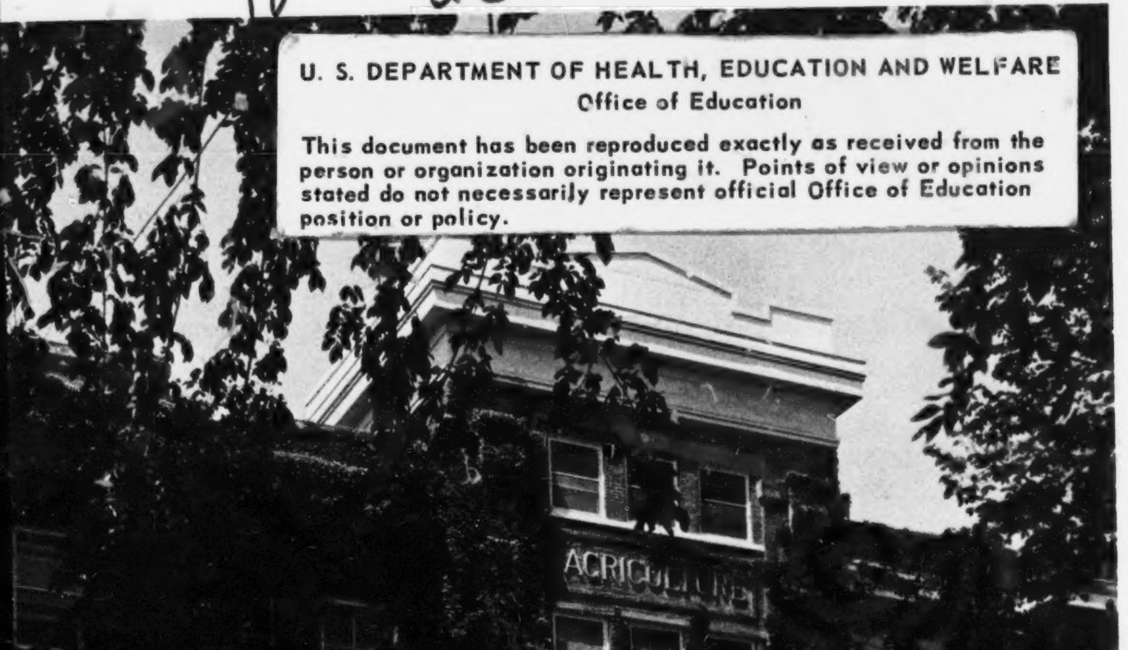

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SELF EVALUATION REPORT II

School of Agriculture

Prepared for the

Commission on Higher Schools,
Northwest Association of Secondary and
Higher Schools
January 1960

OREGON STATE COLLEGE
Corvallis, Oregon

All programs of research and education in the broad area of agriculture at Oregon State College are now administered under the direction and supervision of a Dean and Director of Agriculture. For convenience and effectiveness in the conduct of work this total area of responsibility is sub-divided into the following three major divisions:

1. Agricultural Experiment Station
2. Federal Cooperative Extension Service
3. Resident Instruction (School of Agriculture)

OBJECTIVES

Specific objectives of the various divisions within Agriculture

1. Agricultural Experiment Station

The general objectives of the Agricultural Experiment Station are as follows:

A. Conservation and efficient use of the State's natural resources including soil, water, fish, wildlife, forest, and ranges and their integrated management to provide the greatest public good.

B. Increasing efficiency of agricultural and forest production.

C. Improving the processing, distribution, and marketing of products of agriculture and forestry.

D. Testing and developing new crops and new uses for old crops as a means of reducing crops surpluses.

E. Collecting and analyzing basic information needed in development of comprehensive agricultural and forestry programs and policies.

F. Advancement of human well-being through research in the selection, preparation, and preservation of food, the determination of human nutrition requirements, and the role of food in maintaining optimal health and the selection, construction and care of clothing and household fabrics.

1a. In conjunction with these broad but rather specific objectives, certain departments have elected to add the following guiding statements for their specific areas and express in their judgment the extent to which the objectives can be carried out.

A. Agricultural Chemistry

(1) Specific departmental objectives and procedure followed in their review and adjustments.

a. Conduct research pertinent to agriculture and closely related industries. Research projects may originate (1) within the department, (2) cooperatively between two or more departments, (3) through grants placed with Agricultural Research Foundation, or (4) through contracts with Federal or other agencies.

b. Supervise graduate programs for advanced degree candidates in the area of agricultural bio-chemistry.

c. Provide a limited amount of routine analytical service to other experiment stations and extension divisions, and Federal agencies of the State, on a fee basis.

Research projects are periodically reviewed to determine progress and need for revision or termination. Need for revision of projects is generally dictated by change in objectives, by new developments or new knowledge relevant to the research problem, attainment of original objectives, or promise of greater progress by attacking the problem from a different direction.

(2) Departmental objectives a. and c. can be carried out satisfactorily under the present program and organization. Additional financing by State funds is urgently needed to relieve some academic staff from dependence on grant or contract funds as a major source of their salaries. Dependence on such funds for academic salaries has, in several instances, been responsible for difficult departmental budgetary adjustments when grant or contract funds were suddenly terminated.

Satisfactory progress toward a good graduate program (departmental objective b) is impossible under the present arrangements. The Agricultural Chemistry Department is the only experiment station division on the campus that does not have its own teaching program and the prerogative of granting undergraduate and graduate degrees in its own field. Until this situation is remedied the staff can act only as major professors to graduate students from other departments on a courtesy appointment basis. Such a relationship can never be expected to attract graduate students. Thus, this department is, in a sense, deprived of a major source of research assistants available to all other divisions of the Experiment Station.

B. Agricultural Economics

(1) The basic objective of this department is to bring about a better understanding of the economic forces which contribute to the efficient allocation of resources to the food industry of Oregon -- farming, processing, marketing and retail distribution. This is accomplished by:

a. Basic and applied economic research into those factors which limit the economic (and profitable) use of resources.

b. A hard core of courses of resident instruction (undergraduate and graduate) designed to teach the application of economic, social and cultural principles to short and long run problems of adjustment to a changing environment.

c. An off-campus educational program with farmers, legislators, business leaders, and the general public through meetings, written materials and other available means of communication.

(2) Additional staff and graduate student effort could enable this department to maximize its effectiveness in achieving the basic objective. The department, however, is quite well balanced at the present time in its pursuit of the objective outlined with respect to staff members complementing one another from the standpoint of technical training.

(3) Many members of the staff serve in a technical advisory capacity with firms making up the food industry. The department also performs similar services for agencies of the state and federal government.

C. Bacteriology

Specific departmental objectives from the research standpoint include studies on various basic and applied problems in microbiology under administration of the Agricultural Experiment Station and School of Science. Six senior staff members conduct state and contract supported research under Experiment Station administration and two have grants on contract from federal agencies under School of Science administration.

Non-instructional activities of the department include research in basic microbiology and virology as well as various applied fields such as pathogenic, soil, food and dairy, water and sewage, and industrial microbiology. Extension of such research is regularly carried on in the form of journal publications, correspondence, visitations, and public talks in Oregon and various parts of the United States. Research activity is directly related to the educational objectives in several ways. Each member of the teaching staff is actively engaged in research in his field which assists in keeping abreast of new developments in his sphere of interest. The M.S. and Ph.D. programs require candidates to conduct laboratory research on projects under direct supervision of the staff. Such research is included in the instructional program required of the candidate and at the same time contributes toward solving basic and applied problems in microbiology. It represents, therefore, contributions to science, industry, public health and at the same time, trains new scientists for industrial, government, and academic careers.

D. Botany and Plant Pathology

(1) Provide opportunity for undergraduate students to obtain thorough grounding in all areas of botany and in plant pathology.

(2) Provide advanced courses and research training in major areas of specialization for graduate students who wish to pursue advanced degrees in areas of botany and plant pathology at Oregon State College.

(3) Maintain a well-rounded research staff in botany and plant pathology competent to meet problems of Oregon agriculture related to plant growth and reproduction and the cause and control of plant diseases.

(4) Provide suitable facilities and environment to encourage departmental staff to conduct basic research and to develop a high degree of proficiency and attainment in their respective areas of specialization.

Objectives and operational procedures are subject to frequent review in informal conferences between staff and department head. Formal review of objectives involving change or adjustments is handled first on a committee basis then reviewed by the departmental staff.

Departmental objectives can in large measure be carried out under the present program, organization, and resources. A first step in carrying out objectives must be the reduction of teaching loads in the department from the 1957-58 average of 19.8 contact hours per week to an average of 14 - 16 contact hours per week.

Associated with the instructional activities in the department of botany are the following units which are of great value to the instructional program:

(1) The Herbarium which contains some 144,000 entries is available as a reference source for graduate students in taxonomy and for other students or researchers who may be interested in plant identification.

(2) The Agricultural Experiment Station adds a great deal to the calibre and range of course work that is offered in the Department of Botany. Fifteen staff members are on joint appointment in the Department of Botany in Science and the Department of Botany and Plant Pathology in the Agricultural Experiment Station. An additional six scientists are on appointment in the Experiment Station only, but participate in seminars and other educational functions in the department apart from formal course work. If the department consisted of instructional staff only, the total number of staff members would probably be twelve to thirteen, whereas the combined instructional and research staff totals 32.

Research: In addition to research supported by the Agricultural Experiment Station a number of staff members carry on research programs on their own time or with the support of granting agencies such as the National Science Foundation or the National Institutes.

E. Dairy and Animal Husbandry

Develop and maintain an aggressive, coordinated research effort aimed at solving some of the problems confronting the dairy and livestock producers of Oregon. This involves both basic and applied research.

F. Entomology

Solve insect problems of concern to Oregon farmers.

Answer some of the basic and long range problems in entomology by research in such fields as toxicology, physiology, taxonomy, morphology and ecology.

Departmental objectives are reviewed at staff meetings and in consultation with staff members and administrative advisors.

The department is fairly well equipped with staff and facilities to carry out this program. Specific needs are for more subprofessional help and more laboratory space for specialized research.

G. Food and Dairy Technology

The research program of the Department of Food and Dairy Technology has for its over-all objective the establishment of basic scientific information about foods as they may be affected by source and type of raw material, methods of preserving, processing, packaging and storage. Another objective is assisting food processors with certain specialized research and development projects which may be peculiar to the processing, etc., of a specific commodity. Periodic reviews of the specific objectives of each of the projects, as the latter are related to the over-all objectives of the department, are made in staff meeting or by specific problem oriented personnel on an inter-and-intra-department basis.

H. Home Economics

The objective of Home Economics Research is to contribute to the advancement of human well-being through research in the selection, preparation and preservation of food, the determination of human nutrition requirements and the role of food in maintaining optimal health, and the selection, construction and care of clothing and household fabrics. Reviews of and adjustments in the research program are accomplished through departmental seminars and conferences and through meetings of regional technical committees.

Under the present program, organization and resources the department is able to carry out the stated objectives. However, the time is not far off when the personnel shortage will be acute because of the short supply of graduate students receiving training in nutrition research techniques. The department is trying to do its bit to stimulate interest in graduate work but this is a difficult task since many of the graduating seniors are offered interesting and remunerative positions without graduate training. Other educational and industrial institutions are willing to take college graduate students on their staffs with the understanding that they will obtain specialized training on the job.

I. Poultry

(1) Conduct investigations in the areas of breeding, nutrition, reproduction physiology, and management of both chickens and turkeys.

(2) To keep informed of research results of other investigators in other institutions.

(3) To keep informed of both economic and technical problems in the industry so that future problems can be anticipated - and "putting out fires type of research" reduced to a minimum.

J. Veterinary Medicine

Research is directed primarily toward studies that will provide information for the solution of the more important animal diseases that affect Oregon livestock and poultry. A limited research activity is devoted to basic research on animal diseases.

Diagnostic services are offered as an aid to the State Department of Agriculture in making specific disease diagnoses for the control of various contagious infectious animal diseases. The diagnostic services and research programs complement each other in mutual aid when considering many animal diseases that are encountered.

The research and diagnostic services are of invaluable aid in supplying materials for instructional purposes. Further, the practical problems encountered in the diagnostic services serve as excellent examples regarding animal disease control.

1b. Fulfillment of all of the preceding objectives is aided through the activities and guidance of the Oregon Agricultural Research and Advisory Council formally organized on September 2, 1948 with the following purpose in mind:

To act as an advisory group representing all segments of Oregon agriculture before the Oregon State College, The State Agricultural Experiment Station, the State Extension Service, the State Department of Agriculture, the State Budget Director, the Governor, the Legislature, the State Board of Higher Education, with particular reference to research and the development of agriculture in Oregon.

2. Federal Cooperative Extension Service

A. Smith-Lever Act:

"To aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of the same."

This broad charter clearly identifies Extension's function as education. This is not education in the abstract, but education for action. It is education of an informal and distinct type. It is education directed to helping people better solve the various problems which they encounter from day to day in the fields of agriculture and home economics and related subjects.

B. In the performance of this function the Extension Service has always held high those objectives which aid people to attain:

(1) Greater ability in maintaining more efficient farms and better homes

(2) Greater ability in acquiring higher incomes and levels of living on a continuing basis

(3) Increased competency and willingness, by both adults and youth, to assume leadership and citizenship responsibilities

(4) Increased ability and willingness to undertake organized group action when such will contribute effectively to improving their welfare.

3. Resident Instruction

The faculty composing the School of Agriculture subscribes without reservation to the total aims and objectives of Oregon State College. It wishes to maintain a strong, aggressive and forward-looking educational program in all areas in which the School has assumed and/or accepted responsibility. Within these bounds the faculties of individual departments have elected to set forth certain specific guide lines. These are listed as follows:

A. Agricultural Engineering

(1) To make available to the student a broad course of study which will enable him to acquire a fundamental background in the agricultural sciences, business, communicative and manipulative skills, and training in elementary engineering principles, thus qualifying him for work of an applied nature in industry and public and self-employment.

(2) To develop attitudes which will enable the student to strengthen his moral character, develop his intellectual curiosity, upgrade his standards of achievement, and

broaden his appreciation of the opportunities and responsibilities associated with living in a democratic society.

Objectives (1) and (2) were formulated and approved at departmental level prior to submitting a revised MTA curriculum (Mechanical Technology in Agriculture), which was shown for the first time in the 1957-58 College Catalog, to Administration for approval. In earlier catalogs the curriculum which is now MTA was known as General Agriculture with Agricultural Engineering emphasis. The MTA curriculum was a complete revision of the earlier curriculum with the longer title. This was done for the purpose of bringing the curriculum up to date and in line with modern developments in various fields of agriculture. The MTA departmental curriculum committee is charged with the responsibility of annually reviewing objectives and making curriculum adjustments in line with current developments in education and agricultural sciences. The committee then reports its findings and recommendations to the entire staff. If revisions are needed and if they are agreed to by the departmental staff they are then submitted to proper committees and authorities of Oregon State College through established channels. Response to the MTA curriculum has been excellent. Enrollment has increased.

B. Dairy and Animal Husbandry

Broadly speaking, the objective of the Department of Dairy and Animal Husbandry is to render the greatest possible service to the Dairy and Livestock Industries of the State of Oregon through an educational program of Resident Instruction, Research, and Extension.

Resident Instruction:

(1) To maintain a strong, aggressive and forward-looking undergraduate program in the broad field of animal science.

(2) To provide a strong and challenging program at the graduate level in the several areas of genetics, nutrition, physiology and meats, supported by solid course work in the basic disciplines.

C. Farm Crops

(1) Available food has always been man's most important problem; it represents survival. It is the responsibility of the Farm Crops Department through instruction to train professional people to better understand the production

problems and procedures of producing feed and food from field crops, and through research to solve problems in connection with this important function in the welfare of mankind. The instruction has three phases; that of resident teaching, extension or off-campus teaching, and graduate training.

(2) This department carries out all of the objectives mentioned in number (1) to a limited degree. However, there is an urgent need for expansion in all areas.

(3) Non-instructional activities are of major importance to this department. Seventy percent of the budget is spent on research and services other than instruction. This research program is extremely valuable in developing new principles and concepts for both the undergraduate and graduate student. It provides the media for the graduate student to obtain basic training in becoming a professional in this particular science. In addition, many members of the staff are well known nationally and internationally, and as a result, serve on many committees and in conferences to aid and abet the welfare of agriculture on this broad scale.

D. Fish and Game Management

Objectives of this division in the area of instruction: The objective of the program is to train students for careers in the scientific management of wildlife resources. Curricula are offered in Wildlife Management and Fisheries supported by work in the related fields of agriculture and science. Emphasis is placed on the production of sustained annual crops of wild birds, mammals and fishes in harmony with major land and water uses for recreational, economic and esthetic purposes. Graduates are employed in all aspects of the fish and game field including management, research, public relations, administration and conservation education.

In keeping with the aims of Oregon State College, attention is focused on developing abilities and attitudes commensurate with the development and conservation of resources through instruction, research and extension.

E. Food and Dairy Technology

The departmental resident instruction program is designed to impart the scientific and technological aspects of foods and their preservation, alteration for use, distribution or utilization and thereby provide the basis for a person's entering the professions of food technology, dairy technology, or food science.

The purpose of the curricula in these fields is not only to provide professional backgrounds, but also educate so as to develop latent faculties and powers through studies in associated and learned fields.

F. Horticulture

The objectives of the Horticulture Department's resident instruction program are as follows:

(1) Assist the student in becoming professionaly competent through knowledge and experience in (1) the basic and applied sciences, (2) horticultural technology, and (3) artisan practices.

(2) Develop students who, as well-rounded citizens, can provide both horticultural and community leadership.

(3) Stimulate the desire on the part of superior students to take graduate training in preparation for a professional career.

(4) Introduce and provide basic subject matter in horticulture to those students not majoring in horticulture but in related fields.

G. Poultry Husbandry

The broad objectives of the Poultry Department are to teach poultry science and techniques to undergraduate and graduate students; to conduct research with chickens and turkeys that will uncover new facts to be learned by students and to enable poultry producers to conduct their operations more efficiently; and to communicate the research findings of the department, as well as those of other researchers, to the poultry industry of Oregon.

More specifically, the objectives of the resident instruction programs are:

(1) Teach students certain of the basic sciences and techniques so that they can be more useful to the poultry industry in meeting present problems and so that they may be more confident in attacking and more effective in solving future problems.

(2) Develop in students an understanding of the forces at work in the poultry industry and the ability to recog-

nize change and adapt to it.

(3) Encourage students to accept responsibility and to participate in organized group activities.

(4) Maintain a well informed staff.

(5) Motivate and develop within the student, to the maximum of his ability, the knowledge and skills necessary to contribute toward success in his occupational choice, community responsibilities and a satisfactory personal and family life.

(6) Counsel with students relative to occupational opportunities in the poultry industry.

H. Soils

The educational objectives of the Department of Soils are compatible with and supplement the aim of Oregon State College, which is to provide both opportunity and inspiration for gaining knowledge, attitudes and abilities which contribute to living in a democratic society. This aim is to be achieved by the Department of Soils by promoting:

(1) The appreciation of the continued need to develop and conserve our soil and water resources.

(2) The understanding of those fundamental chemical, physical, and biological principles which ultimately determine the practical utilization of soils.

(3) The ability to recognize situations wherein soils are not being properly managed and to decide scientifically what should be done to modify and improve soil management practices.

(4) The acquiring and developing of attitudes and abilities which contribute to effective agricultural leadership.

Specifically, the department attempts to provide students with a scientific and practical understanding of soils and their management. Emphasis in teaching is placed on developing an understanding of basic principles and their relationships to determining soil management problems and their solution. A major goal is to present up to date subject matter interestingly and effectively. Emphasis is placed upon developing independent thinking and initiative on the part of the student, often through the use of the problem method of teaching.

Attention is given to developing and understanding the scientific method and its use. This objective is particularly emphasized in the graduate program. It is also considered a part of the department's undergraduate teaching objectives. In counselling and working with students, both undergraduate and graduate, staff members strive to help the student identify his goals and assist him in working towards them. The department tries to help the student develop an understanding of the contributions various courses and activities will make in helping him achieve his goals.

The faculty recognizes a need to promote appreciation, understanding and ability to communicate soils and other information to others. At the graduate level members of the faculty have been particularly conscious of the need to provide students with meaningful teaching experience.

Recent Studies of Objectives:

An intensive intraschool study and review of educational objectives including that of individual courses and curricula was initiated in January 1958 with the appointment of a Curricula Committee composed of M. D. Dawson, (Soils); W. H. Foote, (Farm Crops); W. A. Frazier, (Horticulture); C. E. Samuels, (Food and Dairy Technology); G. R. Sitton, (Agricultural Economics); J. E. Oldfield, (Dairy and Animal Husbandry); and C. E. Bond, (Fish and Game Management). Later additions as replacements for personnel taking leave from the campus were S. K. Christensen, (Agricultural Economics); and E. A. Day, (Food and Dairy Technology). This committee was requested to make in cooperation with all members of the faculty a thorough, critical and objective analysis of the total educational experiences to which students enrolled in agriculture at Oregon State College are exposed. The broad assignment included:

1. Study the total undergraduate educational program for students enrolled in the School of Agriculture.

2. Provide counsel and general guidance to the faculty in all departments.

3. Provide recommendations and guidance to the Dean of the School of Agriculture with respect to the general merits of proposed changes and additions to course offerings and curricula.

4. Serve as a "catalytic agent" where necessary to bring about in each department a thorough study of educational objectives.

5. Encourage and assist where appropriate a continuous study by all faculty members within a department the contents and objectives of every course offered by the department and relate these course offerings to the total educational needs of the students.

6. Consider with the various faculty groups the importance of discovering and implementing methods of stimulating within students a greater degree of curiosity for a complete understanding of all subjects and topics encountered in his or her education.

7. Stimulate to the maximum extent possible a continuing search for and use of teaching methods that will develop to the maximum a student's dependence upon himself for acquisition of knowledge and to learn how it may be most effectively employed to improve and advance the welfare and productivity of man.

More specifically, this committee was charged with the responsibility of:

1. Determining the educational objectives of all departments within the School of Agriculture.

2. Determining to the best of their ability what the educational objectives of the School of Agriculture should be.

3. Searching for approaches by which the School of Agriculture can provide young people with the best education possible.

4. Examining with the faculty present course offerings and curricula for the purpose of determining:

    a. Their value in meeting the educational needs of students in agriculture.

    b. Extent of subject matter duplication within and among departments.

    c. Extent to which integration of courses can be effected.

In addition to working closely with departmental faculty groups in this broad appraisal of educational objectives the committee established five inter-departmental sub-committees to make intensive studies in the following areas:

1. Introductory courses in agriculture

2. Agricultural and biological sciences

3. Physical sciences

4. Communications, Humanities and Social Sciences

5. Management, Marketing, and Business

Certain departments have also carried out rather extensive studies to help crystallize thoughts on instructional objectives. As an example, a survey of students majoring in Fish and Game Management was made in 1955 and evaluated with respect to the objectives of the resident instruction program of the department. Of particular interest were the results pertaining to employment choice; work location; graduate work contemplated, and where; why fish and/or game management was chosen as a major; and why Oregon State College was chosen as the school to study fish and/or game management.

In 1951 a survey was made of all graduates of the Department of Fish and Game Management employed in the wildlife field. The questionnaire was broken down basically into the two following categories: (1) Employment. Questions relating to title of position held, with whom employed, tenure, starting and current salary, nature of work, and retirement benefits. (2) Education Preparation. Courses of most and least benefit taken, those that should be added, importance of public relations, English and public speaking, suggested improvements in the Department. Results of the questionnaire were analysed and incorporated into the resident instruction program. The most significant finding was that over 90 percent of the graduates recommended additional courses in communications.

Fulfillment of Objectives

The extent to which objectives can be met or carried out is rather well portrayed by the following thoughts as expressed by departmental faculty groups:

A. Agricultural Engineering

It is the feeling of the departmental staff that objectives of the Mechanical Technology in Agriculture Curriculum can be completely carried out. Departmental organization, educational resources and staff of the department are adequate to implement objectives.

B. Dairy and Animal Husbandry

The extent to which departmental objectives can be carried out under present program, organization and resources, will depend primarily on the ability of the department head and the staff to utilize the human and physical resources available. There will naturally always be some limitations of funds and facilities, but these will most likely be secondary to the human weaknesses and limitations.

C. Fish and Game Management

It is believed that the resident instruction program of the Department of Fish and Game Management is accomplishing its objectives. Graduates of the department are well accepted by state and federal conservation agencies throughout the United States and in several foreign countries.

D. Food and Dairy Technology

The specific objectives of the resident instruction program and those relating to research and extension can be developed to their fullest extent within the framework of the departmental organization. It is only in the area of dairy technology extension where we are unable to fulfill the requirements within the framework of the departmental organization. There exists a real need for an extension dairy technologist; however, such current requirements are fulfilled by resident instruction or experiment station personnel operating from a non-extension budget.

E. Horticulture

In general, it is felt that adequate resources in the form of staff and physical facilities are available for carrying out the stated objectives. Review and adjustment are more or less on a continuing basis and the following comments are appropriate:

(1) Opportunities for students to obtain knowledge and experience in horticultural technology and artisan practice beyond that obtained in formal course work are being realized to some extent by employment of students on research projects conducted by staff members. More opportunities for summer employment of students by various horticultural industries should be developed, possibly by cooperative planning with the industry.

(2) There appear to be adequate activities and programs on the campus which provide opportunities for cultural development and experience in horticultural and community leadership. How to stimulate and encourage more students to avail themselves of these opportunities appears to be a problem. Proposed provisions in the curricula for more liberal arts courses will be of assistance in obtaining this objective. Interest in

special programs of an educational or cultural nature, including convocations, musicals, plays, etc., should be encouraged. Opportunities for students to attend certain programs of professional and commodity groups and societies could be considered.

(3) It is felt that under the present program, superior students in general are not being made fully aware of the nature, opportunities, and advantages of graduate work, especially as preparation for careers in research and teaching. A recognition of this situation is indicated by the creation of an Agricultural Science program in the proposed curricula reorganization. More opportunities for contacts between superior students and the research staff should be encouraged and developed. Possibly there is a need for a special course dealing with the history, philosophy and objectives of science research.

F. Poultry Husbandry

The department's instructional objectives are being carried out in a satisfactory manner. Although the resident staff is small and the extent of the course offerings is restricted, the current numbers of students interested in poultry husbandry courses probably do not warrant any considerable increase in staff.

G. Soils

Improvement has been made during the past four or five years towards achieving many of the departmental objectives. However, much remains to be done. Since none of the staff have been at Oregon State College more than about seven years, this has been a period of re-evaluation and change in program organization and, fortunately, in physical resources. The full effects of some of these changes are beginning to be felt. It is anticipated that major attention during the next few years will be directed more towards improving and perfecting our present program and organization than in initiating major changes. Emphasis will be placed more in striving for excellence within the general framework of the present program and organization. This does not preclude the possibility of changes from time to time as the needs arise. Curricula revisions in the Department of Soils as well as the entire School of Agriculture that have been under consideration for several years may well suggest some changes in course offerings and other phases of our program.

Resources to achieve departmental objectives have improved markedly during recent years. This includes above all a highly competent staff. Physical facilities also have been improved by the addition of a new teaching laboratory, many teaching aids and a fairly complete set of visual aids equipment. Although large gains have been made, additional staff, space and facilities will be needed if the department is to achieve all objectives, both now and in the immediate future.

Non-Instructional Activities

All departments within the School of Agriculture have direct responsibilities to the Agricultural Experiment Station and indirect responsibilities to the Federal Cooperative Extension Service. Throughout all departments that make up the School of Agriculture there are only three full time employees who are not jointly employed between the School of Agriculture and the Agricultural Experiment Station, and one of these three men has a joint appointment with the Federal Cooperative Extension Service. An appreciation of the importance of these non-instructional activities to the total educational program and objectives may be obtained from the following departmental statements and outlines:

A. Agricultural Engineering

All members of the staff, with one exception, have varying percentages of their time devoted to research work in the Agricultural Experiment Station. Indirectly, this is an aid and a benefit to teaching because it keeps the instructors aware of research and informational needs of agriculture. This not only broadens the background of the instructors, it also enables them to bring to the classroom the latest information developed by research. The research activities of the department have a definite and beneficial bearing upon the resident instruction program of the department.

B. Dairy and Animal Husbandry

Non-instructional activities of the department include:

(1) Participation in meetings of livestock and dairy organizations

(2) Judging of junior and open class dairy and livestock shows

(3) Speaking before civic and professional groups

(4) Writing for technical and industry publications

(5) Answering hundreds of written inquiries

(6) Participation in state and national professional society meetings

(7) Routine care and management of herds and flocks

(8) Production of feed and forage for herds and flocks

(9) Maintenance of physical facilities, fences, roads

(10) Improvement of lands assigned to the department

All of these activities have a bearing on and contribute toward the total educational objectives of the department.

C. Fish and Game Management

Past and present non-instructional activities of the department include: Host for the Annual Oregon Wildlife Federation Meetings; presenting short courses for State fish hatchery personnel; demonstrations for fur farmers and Oregon State Police; high school visitation programs; and participation in short courses for the Oregon State Game Commission field personnel. In addition, most members of the resident instruction staff do participate directly in either basic or applied research projects. From the standpoint of space, equipment and counsel, the department cooperates with several state and federal research organizations.

Participation by the department and its individual staff members in these research and extension activities is a definite adjunct to the resident instruction program through the attainment of current knowledge and insight into matters relative to wildlife management. These activities lead to increased professional recognition of individual academic staff members.

D. Food and Dairy Technology

The department sponsors several short courses during the course of the year. These may be oriented to industry personnel in the operating, supervisory, quality control, or management echelons. Short courses have been conducted by the department since 1922.

E. Horticulture

Principal non-instructional activities of the department are research and extension. Research activities can be grouped into three general areas: (1) solving of immediate problems affecting the horticultural industry; (2) development of new and improved methods, practices and crops for the welfare of existing industries or which may lead to the creation of new ones; (3) search for new knowledge relating to the production and utilization of horticultural crops for human needs. A benefit as well as direct relation of research activities to teaching is that the new information obtained relative to horticultural knowledge and practices can be introduced into teaching, and thus be made available to the students.

The principal extension activities as carried out by the horticultural staff are: (1) Provide technical service to growers and business in the solution of specific problems, (2) Assist the industry in the adoption of new methods and practices. At the present time, very little, if any, liaison exists between extension and teaching activities within or without the department. The need here, as with research, appears to be one of acquainting students with the purpose and over-all procedures involved in extension activities. Possible consideration should be given to planned student attendance at certain portions of special meetings, such as the annual all-staff conference where new ideas and thoughts relative to extension as well as other staff activities are presented.

F. Poultry Husbandry

All members of the department's teaching staff are actively engaged in one or more Agriculture Experiment Station projects and also, but to a lesser extent, in Extension activities. These activities help to keep the staff "on their toes" with respect to new information available in their respective areas of interest and also to keep them informed about what is going on in the poultry industry in the state.

G. Soils

Research and extension contribute both directly and indirectly to the educational objectives of the department. The overall objective in the soils research program is to determine solutions to the most pressing soil problems of farmers, ranchers, and foresters of the state. Extension then has the job of taking this information to the people who can use it. Thus, in soil science, through research and extension, the department obtains and disseminates information to aid farmers, ranchers, foresters and others in understanding and managing soil and water resources. All members of the department are concerned with managing the soil for efficient, sustained production. This means using the soil to obtain the most profitable production now yet conserving it for future use.

In research the department strives for a balance between so-called "basic" and "applied" research. Most of the research effort of the Department of Soils is aimed at elucidating principles. The department is concerned with the question of "why" as well as "what". The graduate training program and the research program are intimately related at many points. Continued strong attention to principles in the research program and further strengthening of several areas are necessary if the department is to graduate M.S. and Ph.D. students who can compete successfully. All phases of soil research are headed up by competent individuals. Since some of these people are currently "spread too thin", several staff additions are needed to adequately cover the more important research areas.

Maintenance of a strong research program in relationship to meeting the objectives of a graduate training program is well recognized. Actually, in many respects the contributions of the research programs of the undergraduate teaching program are equally important.

The extension program, more than any other, keeps staff members in the department in close contact with both practical and theoretical soil problems throughout the state. Activities of both extension and research personnel in cooperation with members of the fertilizer industry, for example, also provide contacts for job opportunities for students.

Teaching aids and information are exchanged between extension and resident instruction to the benefit of both.

During the past six years, five special workshop courses were taught for vocational agricultural instructors, fertilizer salesmen, county agents and SCS personnel. Vocational agricultural instructors have demonstrated the greatest interest in these courses. Two courses were taught on campus during the summer and three have been taught in Eastern Oregon. Other activities conducted with or for vocational agricultural instructors, high school science teachers and others have also contributed towards an increased understanding of soil science out in the state, especially for high school students. This includes preparation and help on soil judging which has been used extensively by vocational agricultural schools. This was a joint activity of extension, resident instruction and research staff. Teaching outlines on soils for use by vocational agricultural instructors were prepared. Recognizing that many future soil scientists will likely come from high school students who are interested in science, two staff members have prepared and tested in a seminar with high school science teachers an outline on a series of demonstrations in soil science for use in high school science classes.

In 1959 through the cooperative efforts of extension, resident instruction and research staffs fourteen twenty-five minute TV programs were given covering some of the basic principles in soil science. These were Kinescoped and used on several additional TV stations. They are now being used as teaching aids in extension meetings and in vocational agricultural classes. Although this may be primarily an extension function it has contributed ideas to the resident instruction program. Moreover, it is helping to give the public, including parents of prospective students, and prospective students themselves a better insight into soil science and the opportunities for students in soil science.

All members of the staff actively participate in one or more professional organizations. Such participation contributes in many ways both directly and indirectly towards strengthening the resident instruction program. Although much attention in professional societies is given to research, several staff members participate actively in the Resident Instruction Section of the Agronomic Education Division of the American Society of Agronomy, where continued attention on a national basis is given to those problems involved in developing and achieving instructional or educational objectives.

Several non-instructional activities that are generally identified largely with the total resident instruction program make vital contributions towards achieving the educational objectives of the department. A student Soils Club for undergraduates is encouraged. The Soils Club in cooperation with the Farm Crops Club constitute the student section of the American Society of Agronomy which is affiliated with the parent society. One of the tangible activities of the Soils Club is publication of Loess Auger, the OSC Soils Club Newsletter, which is prepared jointly by students and staff. Counselling, both formal and informal, is given high priority. Employment of undergraduate students in the department and assistance in obtaining summer employment that will contribute to their educational goals is another activity. Joint activities between students and staff are fostered to develop acquaintanceship and understanding. Maintenance of departmental display case and a soil monolith exhibit in the hall also contribute to overall departmental objectives.

EVIDENCE OF STABILITY

The Oregon legislature in 1885 provided for the permanent location of the State Agricultural College at Corvallis, Benton County, on the condition that the citizens of the said county would, within four years, erect on the 35 acre Agricultural College Farm a brick building at a cost of not less than $20,000 for the accommodation of the State Agricultural College. The cornerstone to this building was laid in the summer of 1887. (The building erected is now known as Benton Hall).

The first resident instruction courses in Agriculture were offered in 1869. However, the Agricultural Experiment Station was the first of the three divisions of agriculture to be formally organized. This occurred on July 1, 1888 in accordance with provisions of the Hatch Act of 1887. Mr. E. Grimm was named as the first Director and served to 1900. During 1900 Dr. Thomas M. Gatch, then President of the college, assumed responsibilities of the Director. In 1901 James Withycombe was named Director of the Agricultural Experiment Station and served in this capacity to 1914. From 1914 to 1920 Professor A. B. Cordley served as the Director. It should be noted that Professor Cordley was at the same time Dean of the School of Agriculture.

Succeeding Directors and their period of service were as follows:

Name	Years of Service
J. T. Jardine	1920 - 1931
R. S. Besse (Acting)	1931 - 1932
Wm. A. Schoenfeld	1932 - 1950
F. E. Price	1950 -

Vice Directors, Associate and/or Assistant Directors for the Agricultural Experiment Station throughout its organized history were or are:

Name	Years of Service
James Withycombe	1898 - 1900
Ralph S. Besse	1932 - 1953
*Robert W. Henderson	1947 -
Robert M. Alexander	1947 -
Wilson H. Foote	1959 -

* Currently on an assignment at Kasetsart University, Bangkhen, Thailand as Oregon State College's Chief of Party of a team of Visiting Professors under sponsorship of ICA and the Thai Government.

The Oregon Agricultural Experiment Station now encompasses research work and related activities in the following divisions: Agriculture, Forestry, and Home Economics. The division of Agriculture includes these major departments: Agricultural Chemistry, Agricultural Economics, Agricultural Engineering, Agricultural Information, Bacteriology, Botany and Plant Pathology, Dairy and Animal Husbandry, Entomology, Farm Crops, Fish and Game Management, Food and Dairy Technology, Horticulture, Poultry Husbandry, Soils, Statistics, and Veterinary Medicine. Within the Forest Research Division, a unit closely allied with the Agricultural Experiment Station, work is underway in various phases of forest production and management. In addition to the central station there are twelve branch stations and one experimental area located throughout Oregon. These are:

Eastern Oregon Livestock Branch Exp. Station	- Union
John Jacob Astor Branch Experiment Station	- Astoria
Klamath Branch Experiment Station	- Klamath Falls
Malheur Branch Experiment Station	- Ontario
Mid-Columbia Branch Experiment Station	- Hood River
North Willamette Branch Experiment Station	- Aurora
Pendleton Branch Experiment Station	- Pendleton
Red Soils Branch Experiment Station	- Oregon City
Sherman Branch Experiment Station	- Moro
Southern Oregon Branch Experiment Station	- Medford
Squaw Butte-Harney Branch Experiment Station	- Burns
Umatilla Branch Experiment Station	- Hermiston
Central Oregon Experimental Area	- Redmond

A curriculum in agriculture was available to students in 1869, and a professorship was established in 1883. Departments offering work in agricultural subjects were organized into a School of Agriculture in 1908 under the leadership of Professor Arthur Burton Cordley as the first Dean. He served in this capacity to 1931. During the period of 1914 to 1920, Dean Cordley also served as Director of the Agriculture Experiment Station. In 1932 Wm. A. Schoenfeld was appointed Dean and Director of the School of Agriculture and the Agricultural Experiment Station and in 1934 became the Director of the Federal Cooperative Extension Service, thus becoming the first Dean and Director of the three major divisions of agriculture at Oregon State College. In 1950 Mr. Schoenfeld retired and was replaced as Dean and Director by F. E. Price who at that time was the Associate Dean, School of Agriculture.

Agriculture Hall, which, throughout the years has been the headquarters for the Deans and Directors of Agriculture, was dedicated in October 1902.

The School was first organized with a faculty of eight professors. Its early growth may be portrayed by the following additions to the academic staff:

1906 - 1907 - 8 Professors
1907 - 1908 - 14 Professors and Instructors
1908 - 1909 - 19 Professors and Instructors
1909 - 1910 - 22 Professors and Instructors
1910 - 1911 - 25 Professors and Instructors
1911 - 1912 - 28 Professors and Instructors

1912 - 1913 - 30 Professors and Instructors
1913 - 1914 - 44 Professors and Instructors
1914 - 1915 - 48 Professors and Instructors
1915 - 1916 - 52 Professors and Instructors

Today (1959-60) 119 people with an FTE of 43.09 hold academic appointments in the School of Agriculture.

At the outset, students were required to have completed only two years of high school work for admission to degree courses. This requirement was advanced to three years by September 1914 and by September 1915 all students desiring to enroll in a degree program were required to have completed four years of high school work.

At this point student enrollment figures for the School of Agriculture (undergraduate) may be of interest.

Year	No. of Students	Year	No. of Students
1906-07	80	1933-34	149
1907-08	109	1934-35	232
1908-09	187	1935-36	408
1909-10	218	1936-37	522
1910-11	237	1937-38	622
1911-12	303	1938-39	666
1912-13	429	1939-40	696
1913-14	496	1940-41	691
1914-15	547	1941-42	606
1915-16	566	1942-43	422
1916-17	576	1943-44	55
1917-18	425	1944-45	69
1918-19	542	1945-46	182
1919-20	891	1946-47	818
1920-21	856	1947-48	983
1921-22	538	1948-49	980
1922-23	452	1949-50	967
1923-24	355	1950-51	824
1924-25	337	1951-52	679
1925-26	301	1952-53	671
1926-27	305	1953-54	631
1927-28	287	1954-55	638
1928-29	291	1955-56	721
1929-30	325	1956-57	719
1930-31	306	1957-58	720
1931-32	296	1958-59	714
1932-33	194	1959-60	622

Agricultural extension work became an integral part of the total educational program of Oregon State College from almost the very beginning. Subject matter professors conducted educational meetings, conferences, and short courses on the campus and over much of the state. In

November 1911 the Department of College Extension was formally organized and Ralph D. Hatzel was appointed as the first Director. He served in this capacity until 1917. At that time Extension agencies included institutes, publications, itinerant schools, correspondence courses, demonstration farms, field advisers, instruction and demonstration trains, exhibits at state, district, and county fairs, and various organizations such as boys' and girls' clubs.

The Federal Cooperative Extension Service came into being as such in 1913. The effective legislation, however, was not completed until 1914. On August 3, 1914 a Memorandum of Agreement was entered into between the United States Secretary of Agriculture and the President of the then Oregon Agricultural College.

The following summary sets forth dates and names of individuals who have or are presently serving as Dean and/or Director, Vice Director, Associates and Assistants in the Agricultural Experiment Station, School of Agriculture and the Federal Cooperative Extension Service.

Historical Summary of Deans and Directors
and their
Associates and Assistants

Period of Service	Agricultural Experiment Station		School of Agriculture	
	Director	Assistant or Associate	Dean	Assistant or Associate
1888 - 1900	Grimm, E.			
1898 - 1900		Withycombe, Jas.		
1900 -	Gatch, T.M.			
1901 - 1914	Withycombe, Jas.			
1908 - 1931			Cordley, A.B.	
1911 - 1917				
1914 - 1920	Cordley, A.B.			
1920 - 1931	Jardine, J.T.			
1929 - 1931				Besse, R.S.
1931 - 1932	Besse, R.S.(Actg)			
1932 - 1950	Schoenfeld, W.A.		Schoenfeld, W.A.	
1932 - 1953		Besse, R.S.		
1936 - 1950				Price, F.E.
1947 -		Henderson, R.W.		
		Alexander, R.M.		
1950 -	Price, F.E.		Price, F.E.	
1952 -				Cooney, W.T.

Historical Summary of Deans and Directors
and their
Associates and Assistants

Federal Cooperative Extension Service		
Period of Service	Director	Assistant or Associate
1911 - 1917	Hetzel, R. D.	
1917 - 1919	Center, O. D.	
1917 - 1918		Vickers, H. A.
1919 - 1920	Maris, P. V. (Actg)	
1920 - 1934	Maris, P. V.	
1924 - 1926		Macpherson, Hector
1934 - 1950	Schoenfeld, W. A.	
1934 - 1940		Ballard, F. L.
1940 - 1950		Teutsch, W. L.
1945 -		Smith, C. W.
1947 -		Scheel, J. W.
		Ballard, F. L.
		Beck, J. R.
1950 -	Price, F. E.	
1951 -		Mack, Mabel

As further evidence of stability the following departmental reports will be of interest.

A. Agricultural Chemistry - (Agricultural Experiment Station)

The Department of Agricultural Chemistry was organized by Professor Irish about 1878 or 1879 and has been in continuous operation since that date.

Dr. J. S. Butts has served as Head of the Department of Agricultural Chemistry since 1946.

B. Agricultural Economics

(1) Department was founded in 1933.

(2) G. E. Blanch served as Acting Head during the period of 1949 to 1951.

G. B. Wood, Head, 1951 -

C. Agricultural Engineering

The first mention of course offerings in the College Catalog in the field of Agricultural Engineering was in 1903, when a course in Agricultural Steam Engines was offered. In 1905, a course in Farm Mechanics was offered for the Graduate Year.

In 1908, two courses were offered in Farm Mechanics in the Agronomy Department, which included all work in Soils, Field Crops, Farm Mechanics, and Farm Management under Professor H. D. Scudder.

In 1915, W. J. Gilmore joined the staff as Associate Professor of Farm Mechanics, and the next year he became Head of the Department of Farm Mechanics. The Agronomy Department was dissolved at that time and the departments of Farm Crops, Soils and Farm Management, and Farm Mechanics established. Eight courses were listed in the Farm Mechanics offerings at the time.

The department was re-named Agricultural Engineering in 1927 and a degree curriculum in this area was listed for the first time, and continued under the administration of the Dean of Agriculture until 1947. Prior to this date the work of the department had been on a service course basis only.

Since 1947 the resident instruction program of the department has been dually administered by the deans of agriculture and engineering. (This is a national pattern for agricultural engineering departments.) A memorandum of understanding relative to dual administration of the department was signed on September 24, 1947 by all parties concerned. The Dean of Engineering administers the professional curriculum in Agricultural Engineering and the Dean of Agriculture administers the MTA curriculum. The Mechanical Technology in Agriculture curriculum, as it is currently known, was listed for the first time in the 1957-58 College Catalog. This curriculum supplanted the one known as General Agriculture with Agricultural Engineering emphasis. The revision of the latter curriculum, and the change in name, were made to bring it in line with modern trends and developments. The Dean of Agriculture, under terms of the memorandum of understanding, provides and administers the budget of the department. Dual administration has proven to be a very successful and workable arrangement and has been conducive to the attainment of departmental stature and progress.

Administrative Head, Department of Agricultural Engineering, J. B. Rodgers, Professor and Head.

Period of Service: 1946 to date

D. Bacteriology

Date of foundation of department was 1899. It has continued to operate without interruption since that date. Administrative heads during the last ten years:

1949 - 1952	J. E. Simmons
1952 - Present	P. R. Elliker

E. Botany and Plant Pathology

The combined department of botany and plant pathology was organized in 1910 under the headship of Dr. H. S. Jackson and has operated continuously since that time. The Botany department had been in existence for many years before 1900. Organized classes were offered as early as 1876. Name of administrative heads during the last ten years:

1947 - 1958	S. M. Dietz
1958 - Present	Roy A. Young

F. Dairy and Animal Husbandry

The department of "Livestock Husbandry" was organized in 1908. It comprised all farm animals including dairy cattle and was headed by Dr. James Withycombe.

1913 - Separate departments of Dairy and Animal Husbandry were established with

E. L. Potter - Head of Animal Husbandry
Ray Graves - Head of Dairy Husbandry

1917 - P. M. Brandt appointed Head of Dairy Department

1933 - Division of Animal Industries created, comprising Dairy, Animal Husbandry, Poultry, Fish and Game in 1935, and Veterinary Medicine with P. M. Brandt head of the division.

1947 - Fred F. McKenzie appointed head of animal husbandry section

1949 - Division of Animal Industries discontinued and separate departments set up with

P. M Brandt - Head of Dairy Husbandry
Fred F. McKenzie - Head of Animal Husbandry

1956 - Fred F. McKenzie accepted foreign assignment and resigned as head of Animal Husbandry Department

1956-57 - John H. Landers, Jr. - Acting Head of Animal Husbandry

1957 - P. M. Brandt retired from head of Dairy Department

1957-58 - Dairy Husbandry and Animal Husbandry consolidated into one department* with I. R. Jones Acting Head

1958-59 - J. C. Miller appointed head of Dairy and Animal Husbandry Department

G. Entomology

F. L. Washburn was appointed Experiment Station Entomologist in 1891. Professor A. B. Cordley replaced him as entomologist in 1895. The department has been in operation continuously for the past 68 years and now has 12 staff members.

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* Dairy manufacturing consolidated with Food Technology

Dr. Don C. Mote served as Entomologist in charge from 1924 to 1952. Paul O. Ritcher has been Station Entomologist since 1952.

H. Farm Crops

The Farm Crops Department was first established in 1916 with Professor G. R. Hyslop as Head. He remained Head of the department until his death in 1942. It has continued as a department since that date.

Dr. D. D. Hill retired July 1, 1959, having been Head of the Farm Crops Department since 1943. On August 1, 1959, J. Ritchie Cowan was appointed to this post.

The retirement of Dr. D. D. Hill, July 1, 1959, and his appointment as Professor Emeritus constitutes the major change in turnover in staff during the past five years. Other changes involve adjustment of Dr. H. L. Schudel's teaching load to full-time teaching Winter Term only and employment of Dr. W. S. McGuire, December 1, 1956.

There has been only one major increase during the past five years with the addition of an instructorship held by Mr. Marvin Swearingin. In part, this position arose from a graduate assistant plus additional funds that were granted to permit a position carrying a .60 FTE to be established.

I. Fish and Game Management

The Department of Fish and Game Management was founded in 1935 and has been in continuous operation since that date.

R. E. Dimick, present Head of the department, has served in that capacity since the foundation of the department.

J. Food and Dairy Technology

Resident instruction and research related to fruits and vegetables were initiated within the Department of Horticulture in 1919 as Horticultural Products. In 1937 the activities were departmentalized in the Department of Food Products Industries. The change in name from Food Products Industries to Food Industries and then to Food Technology occurred in 1939 and 1946, respectively. In 1957 milk processing (dairy manufacturing) was transferred to Food Technology and the department name was changed to Food and Dairy Technology.

Name of administrative heads for each department during the last ten years, with periods of service for each:

(1) E. H. Wiegand, 1919 to 1952
(2) E. M. Litwiller, Acting Head, 1952 to 1953
(3) H. W. Schultz, 1953 to present

K. Home Economics Research

Home Economics Research was initiated in 1925. It has been in continuous operation since then.

Names of administrative heads during the last ten years:

Clara A. Storvick, Acting Head, 1949 - 1955
Clara A. Storvick, Head, 1955 to present

L. Horticulture

Date of foundation of the department and continuity of operations:

1876	Fruit Culture under Botany
1889	Department of Botany and Horticulture
1890	Department of Horticulture and continuous since

Administrative Department Heads for the past ten years:

1950-51 thru 1954-55	Henry Hartman	- 5 years
1955-56 thru 1959-60	S. B. Apple, Jr.	- 5 years

M. Poultry

The Poultry Department was established in 1907 and has operated continuously since that date. Major work in this department was first offered in 1911. In 1912 eight students were enrolled as majors.

Administrative Head: J. E. Parker - 1946 to date

There have been five members of the resident instruction and research staff since 1954.

One member has been replaced since 1954. W. H. McCluskey was appointed in 1955 to replace L. E. Johnson.

N. Soils

Prior to 1916 soils work was administered in a department of agronomy. From 1916 to 1919 Soils and Farm Management were together. From 1919 to 1951 Dr. W. L. Powers served as head of the Department of Soils. The first Ph.D. degree granted at Oregon State College was with Soils as a major. This was completed in 1935. Present staff have all been added since 1952.

Prior to 1951 Dr. W. L. Powers was head of the department for many years. In 1951-52, Professor C. V. Ruzek acted as department head. Since September 1952 Dr. H. B. Cheney has been head of the Department.

O. Veterinary Medicine

The Department of Veterinary Medicine was established in the School of Agriculture in 1912 and Doctor Bennett Thomas Simms became the first Head of the new department. Doctor Simms served as department head until 1938 when he resigned to accept a position with the U. S. D. A. Doctor J. N. Shaw, a department staff member since 1926, became head of the department in 1938, served in this capacity until 1955 when he reached the age of 65, following which he devoted full time to research and teaching. Doctor E. M. Dickinson became head of the department in 1955 and continues to serve in that capacity.

Only part of the staff in the department are concerned with teaching. None of the staff devote all of their time to teaching. The time is divided between research, resident instruction and agriculture technical advisory service.

Turnover of Instructional Staff

The number and rate in percent of faculty replacements (turnover) made during the last five years is reported in the following table by departments.

Turnover of Teaching Staff
(1954 through 1959)

		Total Teaching Staff	No. of Individuals		% Turnover
School of Agriculture	Year	(FTE)	Total	Turnover	(Individuals)
Administration	1954-55	1.83	4	0	0
	1955-56	1.83	4	0	0
	1956-57	1.86	4	0	0
	1957-58	1.86	4	0	0
	1958-59	1.83	4	0	0
Agri. Economics	1954-55	3.36	11	1	9.1
	1955-56	3.39	11	2	18.2
	1956-57	3.43	11	0	0
	1957-58	3.39	12	0	0
	1958-59	3.39	12	0	0

Turnover of Teaching Staff (Cont'd)
(1954 through 1959)

School of Agriculture	Year	Total Teaching Staff (FTE)	No. of Individuals Total	No. of Individuals Turnover	% Turnover (Individuals
Agri. Engineering	1954-55	3.78	9	0	0
	1955-56	3.91	9	0	0
	1956-57	4.22	10	1	11
	1957-58	5.33	10	0	0
	1958-59	5.33	11	1	10
Dairy and Animal Husbandry	1954-55	4.32	13	2	15
	1955-56	5.21	17	1	6
	1956-57	5.22	19	2	10
	1957-58	5.18	17	2	12
	1958-59	5.22	18	1	6
Farm Crops	1954-55	4.08	15	1	6
	1955-56	4.08	13	1	7
	1956-57	3.18	10	1	10
	1957-58	3.93	11	0	0
	1958-59	4.51	14	2	14
Fish and Game Management	1954-55	4.10	5	N	
	1955-56	3.94	5	O	
	1956-57	3.94	5		N
	1957-58	4.34	6		E
	1958-59	5.28	7		
Food and Dairy Technology	1954-55	4.01	9	0	0
	1955-56	4.01	9	1	11
	1956-57	4.03	10	1	10
	1957-58	5.07	13	1	10
	1958-59	5.06	15	1	7
Horticulture	1954-55	3.86	13	1	8
	1955-56	3.86	13	0	0
	1956-57	3.61	12	1	8
	1957-58	3.88	14	2	17
	1958-59	3.88	14	0	0
Poultry Husbandry	1954-55	1.12	5	N	
	1955-56	1.12	5	O	
	1956-57	1.12	5		N
	1957-58	1.12	5		E
	1958-59	1.12	5		
Soils	1954-55	3.00	6	1	17
	1955-56	3.26	9	5	56
	1956-57	3.01	9	0	0

Turnover of Teaching Staff (Cont'd)
(1954 through 1959)

School of Agriculture	Year	Total Teaching Staff (FTE)	No.of Individuals		% Turnover (Individuals)
			Total	Turnover	
Soils (Cont'd)	1957-58	3.14	9	4	45
	1958-59	3.12	10	1	10
Veterinary Medicine	1954-55	1.55	4	0	0
	1955-56	1.56	4	0	0
	1956-57	1.55	4	0	0
	1957-58	1.60	4	1	25
	1958-59	1.51	3	1	25

Student Enrollment

The yearly enrollment of students in the School of Agriculture over the last ten years is shown in the next table. These figures do not include students enrolled during summer sessions and in extension courses.

Year	Undergraduates	Graduate Students	Total
1949-50	967	86	1053
1950-51	824	86	910
1951-52	679	97	776
1952-53	671	101	772
1953-54	631	97	728
1954-55	638	94	732
1955-56	721	104	824
1956-57	719	116	835
1957-58	720	124	844
1958-59	714	120	834
1959-60	622	144	766

FINANCE

The next three tables show in tabular form all funds allocated to the three major divisions of Agriculture here at Oregon State College during the last five years which have been received from outside agencies. (Funds other than those received through regular institutional income sources such as government and foundation gifts or grants and restricted scholarships.)

School of Agriculture - The only funds received in categories requested are those for scholarships restricted to students enrolled in agriculture.

1954-55	$ 6,466.67
1955-56	7,795.00
1956-57	8,595.00
1957-58	8,395.00
1958-59	9,145.00
1959-60	10,393.00

Agricultural Experiment Station:

1954-55	$158,129.78
1955-56	145,949.53
1956-57	164,978.36
1957-58	291,029.80*
1958-59	279,023.53
1959-60	267,179.98**

Federal Cooperative Extension Service:

Source	1954-55	1955-56	1956-57
State	$1,121,143	$1,161,212	$1,179,408
Federal	438,787	521,380	560,423
County	399,984	428,632	438,924
Miscellaneous	105,389	114,502	120,005
TOTAL	$2,065,303	$2,225,726	$2,298,760

Source	1957-58	1958-59	1959-60**
State	$1,616,926	$1,616,926	$1,745,180
Federal	595,207	643,910	629,910
County	468,368	501,546	532,814
Miscellaneous	141,912	111,619	120,800
TOTAL	$2,822,413	$2,874,001	$3,028,704

* Forest Research Division added to the Agricultural Experiment Station

** Estimated

Student-Credit-Hour Costs

The following figures provide information on the cost encountered by the School of Agriculture in conducting course work each of the past three years. The first set of figures reflects student-credit-hour cost when only the instructional budget is considered. The next series of figures presents perhaps a more realistic appraisal of these costs since they include restricted as well as unrestricted funds and those used in the purchase of equipment.

	1956-57	1957-58	1958-59
(a) School of Agriculture Budget*	326,764.63	405,309.92	426,641.52
Student Credit Hours	15,058	15,665	15,115
Credit Hour Cost	21.70	25.87	28.23
(b) Farm Maintenance Budget*	254,483.16	279,817.41	309,722.96
Student Credit Hours	15,058	15,665	15,115
Credit Hour Cost	16.90	17.86	20.49
(c) Total Budget* (a) and (b)	581,247.79	685,127.33	736,364.48
Student Credit Hours	15,058	15,665	15,115
Total Credit Hour Cost	38.60	43.74	48.72
(d) School of Agriculture Total Budget** (Unrestricted Funds)	342,106.21	415,874.28	439,757.14
Student Credit Hours	15,058	15,665	15,115
Credit Hour Cost	22.72	26.55	29.09
(e) Farm Maintenance Total Budget** (Unrestricted & Restricted Funds)	257,425.70	288,994.92	317,944.05
Student Credit Hours	15,058	15,665	15,115
Credit Hour Cost	17.10	18.45	21.03
Subtract expenditures from sales income (Restricted)	203,361.85	227,066.41	254,467.70
Farm Maintenance Budget from Unrestricted Funds only	54,063.85	61,928.51	63,476.35
Student Credit Hours	15,058	15,665	15,115
Credit Hour Cost	3.59	3.95	4.20
(f) Total Budget** (d) and (e) of Unrestricted Funds only	396,170.06	477,802.79	503,233.49
Student Credit Hours	15,058	15,665	15,115
Credit Hour Cost (Unrestricted only)	26.31	30.50	33.29

* Budget does not include building maintenance or equipment costs

** Total Budget includes equipment

PLANT

Limitations Placed on Programs Due to Inadequacies in Facilities

Perhaps the best portrayal of limitations on programs of instruction and research including expressed needs for additional or improved facilities in agriculture can be made by resorting to the thoughts of members of the faculty who represent the departmental areas of work. Without such thought and concern for the future, progress would be slow. With this as the approach to this section of the report, the following statements are presented:

A. Agricultural Chemistry - (Agricultural Experiment Station)

At the time of this report, space occupied by the department is very inadequate. However, in the fall of 1961, the department will move into new quarters in the second unit of the Physics-Chemistry building where it will have about three times the present space and immensely better facilities than are now available. Over the past five years several expensive items of scientific equipment have been acquired by the department, principally from grant or contract research funds. At present the department is one of the best equipped, from the standpoint of research apparatus, of any division of the Experiment Station. New equipment is constantly being produced and for efficient operation it will be necessary to purchase the new items.

When the new quarters become available in the fall of 1961, the department will be well housed. Even with continued growth (from four persons in 1946 to approximately 50 at present) the department should have adequate space.

B. Agricultural Economics

Physical facilities are generally adequate. Administration has been sympathetic in providing private offices and good equipment for members of the faculty. However, the department needs four additional private offices.

The department also needs a small private conference room seating 15-20 persons.

C. Agricultural Engineering

The most urgent departmental need is for additional shop, laboratory and "desk space" for graduate students. The space available in the present A. E. building is far short of actual needs. It is necessary, many times, to hold certain laboratory classes in the area which is called "Experiment Station Laboratory", an area of 1612 square feet. This creates a crowded and sometimes unsafe condition. When a class is held in this laboratory, it often means that research work gets crowded back into a corner and this is undesirable both from the standpoint of research and teaching. This area is also used by the service mechanic in the performance of work for other departments. Separate and designated areas for research, teaching and service work are needed in order to get maximum productivity from research workers, instructors and service personnel.

Specific needs of the department, spacewise, are: additional shop and laboratory space, particularly laboratories for soil and water, farm machinery, farm structures and farm mechanics An outdoor laboratory for soil and water research, teaching and extension activities would be a most welcome addition to the facilities of the department as would a reasonably sized convenient area of land for classes in farm machinery and for research related to the development of spray equipment, and for the testing of experimental equipment developed and built by the department.

The service work of the department has built up to the point where space devoted solely to this type of activity is needed. Another departmental need is for "desk space" for graduate students. At the present time there is no space for that purpose, and little possibility of developing any.

D. Bacteriology

Specific serious limitations from inadequacies in present physical plant facilities:

The most serious limitation for Bacteriology stems from the fact that the department is located in an old building which for the most part has undergone little modernization since its construction. Modernization mostly has consisted of improvising to adapt to the old construction characteristic of the building. Following are specific examples of both teaching and research problems that this condition creates:

Laboratories for the department are located on the third, fourth and fifth floors of the building. Stairs, especially to the fifth floor, are dangerously steep and difficult. There is no elevator in the building for either personnel or equipment and supplies. Consequently heavy pieces of equipment and furniture weighing many hundreds of pounds have to be carried up and down, sometimes five floors, by hand. Staff and teaching assistants continually carry heavy loads of classroom and research materials from one floor to another to conduct their normal work. This cumbersome arrangement definitely impedes teaching and research effort.

Because of the age of the facilities and the intricate requirements for plumbing and electrical circuits for modern laboratory equipment, continual difficulty is encountered with breakdown of these facilities. Frequent water leaks damage walls, ceilings and facilities of lower floors and cause interruption of work; and overloaded electrical circuits in an old building with wooden interior present an ever-present fire hazard.

At the present time both teaching and research are conducted in pathogenic bacteriology and virology. It is extremely difficult with the physical facilities available to adequately isolate or disinfect some areas used for instructional and research purposes. This provides a constant hazard for both department personnel and students who use the building.

The Department of Bacteriology has outgrown its present quarters to the point that it is difficult to find space to accommodate new teaching and research equipment. Consequently, some equipment is not used as effectively and efficiently as it should be.

Other physical facilities lacking in the department include a pilot plant for industrial fermentations. This is needed for manufacture of cell crops for work on bacterial physiology as well as antibiotic production and other phases of instruction and research in industrial microbiology.

There is only one constant temperature incubator room for the entire department which now is spread over three floors. Incubator facilities are seriously lacking, therefore, for both teaching and research. There also is no adequate seminar and conference room available to the department. Another need is a department library. The department has made a start in this direction but needs additional books and periodicals and space for them. There is no central stockroom for dispensing supplies and small equipment. Consequently, all such items are scattered throughout the department which makes efficient operation more difficult.

In general, the old building and facilities also present problems in contamination of cultures in both teaching and research. This problem is a most difficult one to overcome under such conditions and frequently affects experimental results adversely.

Needs for additional and improved facilities include such items mentioned above as elevator, pilot plant, incubator rooms, better facilities for isolation of pathogenic teaching and research, seminar and conference room, stockroom and more space in general.

Specific items of equipment needed include an electron microscope, recording spectrophotometer, scintillation counter, autoclaves, phase microscope, incubators, cold rooms and water baths. However, space for installation of such equipment becomes increasingly difficult to find and each addition reduces scarce working and teaching space. There is a serious need for additional floor space in addition to improved teaching and research facilities. At the present time the department has a total of about 19,000 square feet of floor space which is utilized. It is estimated that present rate of growth will necessitate double this space within the 1965-70 period. It will be difficult to add badly needed staff members to the department unless some provision is made for increased space.

Teaching and research are seriously hampered also by lack of sufficient materials such as glassware, chemicals and other culture supplies. Present budgets are not ample to provide these materials, especially for teaching purposes.

A better understanding of the overall program and potential of the department may be obtained by considering growth of its graduate instruction and research program. In 1947 when the present group of staff began its activity at this institution there was one graduate student working on an M.S. degree. At the present time this number has grown to 24 graduate students working on either M.S. or Ph.D. degrees. During this period the staff activity has been recognized by one national award, The Borden Award, two all-campus Sigma Xi awards for outstanding research, and an Agricultural Research Foundation Basic Research Award. The department has, during the past five years, published the highest number of technical research papers on basis of FTE assigned to research in the Agricultural Experiment Station. It also has been active in disseminating such research information in the form of correspondence, organized talks at various meetings and industrial conferences.

The department as a whole is interested in strengthening and expanding its teaching and research program in every way possible. It is the philosophy of all staff members in Bacteriology that original research also is the cornerstone for a strong teaching program. The staff has been active in recent years in securing outstanding financial support, both federal and industrial, to augment state funds for both basic and applied research in various fields of microbiology.

E. Botany and Plant Pathology

Office and instructional laboratory space available is excellent.

The department needs a great deal of equipment for advanced classes and research and more controlled environment facilities. Research facilities for forest pathology and nematology, and the plant clinic area, should be enlarged when an addition is made to the building.

The departmental program is greatly strengthened through having Botany and Plant Pathology combined in a single department. This permits the department to make use of its best research staff in graduate instruction and the teaching and research programs complement each other to the overall advantage of students and staff.

The department presently has 41 advanced degree candidates in the various areas of Botany and Plant Pathology, and it is believed that they benefit a great deal from being able to take their graduate training in a department where they have opportunities for professional research experience during the course of their training.

The department is in most respects very well housed in the present building, morale is good, and it is attempting to acquire as rapidly as possible the equipment and additional staff needed to bring instruction and research programs to the levels desired.

F. Dairy and Animal Husbandry

There is a lack of adequate facilities for meats research and instruction. Carcass evaluation is to meat animal research what the weight and chemical composition of wheat is to a wheat breeding project. Adequate slaughter, chilling and cutting facilities are a must for a modern meat animal educational program.

There is also a lack of adequate facilities for livestock and dairy activities such as shows, sales, demonstrations, state-wide 4-H and FFA judging contests. Such activities cannot be served until an adequate size pavilion is available. Such a facility would bring many prominent livestock and dairy events to our campus.

Lack of adequate improved feed and forage producing land for the departmental herds and flocks.

There is need for additional laboratory space in Withycombe Hall for animal breeding and physiology and for nutrition research and instruction.

G. Entomology

Additional specialized laboratory space is needed for work in insect physiology and insect toxicology. Present space is used for both teaching and research. The department also needs more rearing rooms and compartmented rooms with temperature control where insects can be studied in controlled environments. Additional office space is needed for staff and graduate assistants. These space needs will be met when a second unit of Cordley Hall is constructed.

H. Farm Crops

The Physical Plant is extremely crowded and places considerable restriction on the teaching and graduate program. There is need for better equipped and additional teaching laboratories and more space for officing graduate students as well as laboratory space for graduate student research. Office space is inadequate for the staff and many offices are overcrowded.

A conservative estimate would indicate that the needs of this department are in the vicinity of 19,000 square feet of floor space. The present space available is far from meeting this particular figure.

I. Fish and Game Management

Present departmental space (approximately 5,340 square feet) located on the third floor of Extension Hall is inadequate for 220 major students, resident instruction and research staff (10.0 F.T.E.), cooperating research biologists (9.0 F.T.E.) and clerks (5.0 F.T.E.). Approximately 18 graduate students are quartered in two small rooms (575 square feet); an extensively used departmental library room has 290 square feet of floor space; storage for records, materials, equipment and specimens is located in approximately 685 square feet of floor space; the two student laboratory rooms (1,100 square feet), which also house study collections (fishes, birds and mammals), are inadequate in size for specialized equipment needed for instructional purpose in many aspects of fisheries and wildlife management. College and School of of Agriculture administrators are aware of the space and facilities problems, and they are making plans to alleviate the situation.

Since off-campus research facilities (experimental fish ponds, a test stream, fish physiology and toxicology laboratories and a marine station) are rapidly being developed, the remaining need for adequate space and facilities for resident instruction, research and extension purposes will be accomplished when the department is permitted to move into the present Agricultural Engineering building.

J. Food and Dairy Technology

The most serious limitation to the program lies in the area of research and extension.

The limitations in research are due primarily to the location of the dairy technology group and the food technology group in separate buildings. This necessitates the duplication of certain pieces of laboratory equipment. Also, the more costly items cannot be duplicated, thereby resulting in the unsatisfactory practice of transporting the experimental material to the particular instrument.

The second limitation is in the area of Dairy Technology Extension. Considerable time of the staff in dairy technology is spent on extension activities, thereby placing restrictions on teaching and research. The total FTE for dairy technology is as follows:

Resident Instruction	1.20
Experiment Station	2.22
Agricultural Technical Advisory Service	.08
Dairy Products Laboratory	.40
	3.90

It is estimated that 25% of the time of the individuals employed to teach and do research in dairy technology is required to perform extension service activities. Considering only Resident Instruction and Experiment Station budgets, .86 FTE perform extension activities. This is done, whether rightly so or not, by utilizing time from both Resident Instruction and Experiment Station personnel.

A solution to this problem would be to establish a position of Extension Dairy Technologist and to discontinue the use of Resident Instruction and Experiment Station personnel and funds to provide this service.

Certain of the activities associated with seafoods are located at the Seafoods Laboratory located at Astoria, Oregon. This physical separation results in certain inconveniences with respect to equipment and orientation of research. On the other hand, the location is in the center of the fish processing industry in Oregon and makes it possible for certain services to be performed more directly with the industry.

The laboratory bench facilities in the Food Technology building, though adequate at the time the building was occupied in 1951, are crowded at the present time. Additional laboratory benches are needed and these would cost an estimated $44,000.00.

K. Home Economics - (Research)

The only serious limitation now is concerned with the lack of certain items of equipment. Members of the department are appreciative of the use of equipment of other departments on the campus and their interest in the work of the department.

(1) Staff members have been able to borrow a small fraction-collector (for 96 tubes) from Agricultural Chemistry but there is need for one which accommodates 200 tubes and which has a more precise timing device.

(2) Members of the department are using the $5000 Aminco-Bowman Spectrophotofluorometer in Agricultural Chemistry. Since much of the work in this department is fluorometric, progress could be stepped up considerably if a Spectrophotofluorometer was readily available.

(3) To pursue some of the new trends in cholesterol research the department needs a gas chromatography apparatus for the measurement of fatty acids of cholesterol esters and glycerol esters in blood.

In addition to information stated elsewhere regarding Oregon State College, members of the department believe certain other factors are of significance in understanding the total program of the institution as it affects the staff:

(1) A sabbatical leave program is operative which makes it possible for members of the faculty to serve as visiting scientists in research laboratories in other outstanding institutions in this country and abroad,

(2) There are opportunities to spend short periods of time, e.g., 3 to 4 weeks, in laboratories of other institutions (i.e., Washington University) to study new research techniques in enzymology and nutrition, and

(3) There is good cooperation with other departments, such as Agricultural Chemistry, Bacteriology, etc. on the Campus.

L. Horticulture

(1) Inadequate land facilities -- for research plots and teaching materials and practices.

(2) Inadequate head house facilities for small fruits greenhouse research facilities and floriculture -- resident instruction greenhouses.

(3) Lack of controlled environment facilities -- plant growth chambers, etc., for controlled environment research.

(4) There is need for modernization and repair of existing floriculture and resident instruction greenhouses.

(5) Cold storage facilities at the Lewis-Brown research farm are inadequate for handling fruit harvested and for storage of planting materials, trees, bulbs, etc.

M. Poultry

There are no serious limitation in teaching, research, and extension programs resulting from inadequate physical plant facilities.

Better facilities for the teaching of processing of poultry and eggs would aid. Also, better environmental control facilities - with especial reference to temperature and light - would be desirable.

N. Soils

During the past five years tremendous improvement has been made in adding laboratory and office space and equipment in the department. This has been true for both teaching and research purposes. However, completion of the facility or the addition of the equipment often has come several years after the real need developed.

Although much progress has been made, teaching and research activities in the department are limited both in scope and effectiveness due to shortages of (1) space, (2) improvements in existing space, and (3) major equipment. Some examples of some of these needs both now and in the immediate future are as follows:

(1) Additional laboratory space is needed now or will be in the immediate future for both teaching and research purposes. Currently available space can be used for development of additional laboratory facilities to meet either teaching or research needs but not both. Moreover, development of this space for laboratory use will crowd office space. Additional controlled environment chambers for certain kinds of plant growth studies are needed in addition to the small area that is currently being developed in the department. The laboratory presently devoted to soil testing is adequate to handle only a modest increase in volume. If the volume of soil testing increases sharply, it will soon become inadequate. Moreover, the location of Kjeldahl equipment in this laboratory has been recognized as undesirable for several years but until a small separate laboratory can be provided the department has little alternative but to leave it where it is.

(2) Considerable additional improvements in existing laboratories still need to be made. Some of these include new lights for three major laboratories; additional laboratory benches, cabinets and cupboards, etc., and certain laboratory remodeling.

(3) There is a continuing need for adding equipment to facilitate both research and graduate student teaching. Some examples that can be cited include fluorescent attachments for X-ray spectrograph, completion of differential thermal apparatus, amino acid chromatograph, grinding equipment, colorimeter and equipment for a plant analysis laboratory.

First priority should be placed on more adequately equipping our existing space. A substantial annual budget will be required to do this in a manner that will permit meeting program objectives in both teaching and research satisfactorily. If adequate funds for equipment and remodeling become available, the existing space will be badly crowded within two to five years. This stresses the need to plan for more space within a few years.

During the past year staff members of the department developed plans for space needs in the future. Their study suggests that the long range space needs of the department are about twice the space currently available. Presumably, such increased space needs can be met only by moving the department into a new building.

O. Veterinary Medicine

Laboratory space is adequate for present enrollment and expansion could be met by having additional sections scheduled into existing laboratory space. There are no classrooms for large numbers of students (over 55) for lectures in the present building. Adequate compound microscopes are available for each student to the capacity of the laboratory. Additional dissecting microscopes are needed in order to provide each student with this type of visual aid. Each year the department has been adding additional scopes as funds have been made available.

One of the urgent needs for research, as well as the diagnostic service, is a suitable security building for the isolation of animals and birds that are infected with contagious infectious disease. To make an accurate diagnosis may require that the animal be observed over a period of several days or weeks. At present, no suitable facilities are available to hold such animals. Further, in studies of some contagious infectious diseases, it becomes necessary to artificially infect susceptible animals in order to obtain vital information for developing methods of diagnosis and control. A building suitable for this purpose requires special features in heating and ventilation, and facilities for sterilization and disinfecting all equipment used, as well as the rooms occupied.

MATERIALS AND EQUIPMENT

Value of Equipment and Acquisitions

Value of equipment and acquisitions by the School of Agriculture and Agricultural Experiment Station during the three year period of July 1, 1956 to June 30, 1959 totals $1,944,646.93. This figure includes $364,805.55 worth of equipment purchased by and for the departments of Bacteriology, Plant Pathology and Entomology to be used in research and resident instruction programs. By departments and within the School of Agriculture those expenditures may be shown as follows:

Department	Sub-Division	Expenditures for Equipment		
		1956-57	1957-58	1958-59
Agri. Economics	R. I.	$ 185.91	$ --	$ --
	Station	2,269.74	1,236.65	935.75
Agri. Engineering	R. I.	$ 878.22	$ 1,283.34	$ 975.10
	Station	2,118.39	2,773.97	3,383.06
Dairy and Animal Husbandry	R. I.	$ 2,452.24	$ 5,751.32	$ 6,410.58
	Station	3,235.94	9,093.83	12,714.34
Farm Crops	R. I.	$ 460.92	$ 457.90	$ 2,061.11
	Station	7,356.79	9,403.57	5,497.93
Fish and Game Management	R. I.	$ 1,252.41	$ 1,484.59	$ 1,026.98
	Station	2,862.00	3,147.24	3,302.52
Food and Dairy Technology	R. I.	$ 1,762.15	$ 158.00	$ 1,613.61
	Station	9,007.53	6,900.05	6,679.32
Horticulture	R. I.	$ 2,934.48	$10,614.63	$ 1,684.64
	Station	10,447.55	13,774.25	4,669.36
Poultry Husbandry	R. I.	$ 398.41	$ 231.30	$ 292.50
	Station	1,861.42	1,963.45	1,178.14
Soils	R. I.	$ 3,370.34	$ 869.45	$ 1,790.87
	Station	19,565.83	8,388.38	10,153.19
Veterinary Medicine	R. I.	$ 183.08	$ 426.00	$ 340.40
	Station	2,881.21	3,588.81	4,147.92
Farm Maintenance		$ 2,942.54	$ 9,177.51	$ 8,221.09

In addition to the above expenditures for equipment and acquisitions it should be pointed out that sizeable gains were made by various units of the Agricultural Experiment Station during the years of 1956 to 1959. Specifically, these may be itemized as follows:

Expenditures
for
Physical Improvements
(Land and Buildings - Agricultural Experiment Station)

Items	1956-57	1957-58	1958-59
Cattle feeding barn	$10,000	$ 8,000	$
Fertilizer and chemical storage building	9,000		
Greenhouses and related service buildings	25,000	30,000	
Calf rearing barn	8,000		
Insect-proof stalls	6,000		
Machinery storage sheds and field laboratories	7,000	68,000	21,000
Quonset storage buildings	15,000		
Remodeling of Ag Utilities building	3,488		
Forest Entomology building	3,000		
Wool tech laboratory		35,000	777
Poultry brooder house		22,218	
Swine research barn and modernization of old swine barn	10,000	20,000	
Land and construction for Southern Oregon Branch Experiment Station		133,000	
Hay drying building		6,000	
Modernization of resident facilities at Eastern Oregon Branch Station		35,000	40,000
Fish pond construction		476	4,000
Fisheries field laboratory			35,000
Land for North Willamette Valley Branch Station		45,000	
Wells and irrigation equipment			12,000
Office and lab building - Klamath Branch Experiment Station		40,000	
Lab addition and office building - Malheur		10,000	
Vegetable farm building			12,000
X-Ray defraction equipment	12,500		
Warburg apparatus	1,500		
Chromatography equipment	1,400		
Centrifuge	1,500		

Expenditures
for
Physical Improvements (Cont'd)
(Land and Buildings - Agricultural Experiment Station)

Items	1956-57	1957-58	1958-59
Technicon, duo-auto	$ 2,120		
Beckman Spectrophotometer	2,300		
Superscaler	1,250		
Controlled termperature tanks (greenhouse)	380		$10,000
Contribution on digital computer	20,000		

Expenditures for Instructional Supplies

Expenditures for supplies over the past three years by departments within the School of Agriculture are presented in the following tabular form:

Department	Sub-Division	1956-57	1957-58	1958-59
Agri. Economics	R. I.	$ 107.13	$ 423.42	$ 252.03
	Station	1,828.20	1,258.76	1,270.24
Agri. Engineering	R. I.	$ 1,405.44	$ 1,395.11	$ 2,124.22
	Station	7,199.76	9,613.39	6,357.37
Dairy and Animal Husbandry	R. I.	$74,704.18	$92,535.33	$82,210.49
	Station	30,000.03	32,254.98	50,885.38
Farm Crops	R. I.	$ 1,605.62	$ 2,088.80	$ 1,644.70
	Station	26,579.10	35,203.62	34,185.00
Fish and Game Management	R. I.	$ 694.98	$ 899.13	$ 933.10
	Station	13,025.59	15,283.31	11,794.45
Food and Dairy Technology	R. I.	$ 2,484.49	$ 3,499.78	$ 3,710.53
	Station	13,474.98	19,928.03	17,934.46
Horticulture	R. I.	$ 2,284.64	$ 2,284.64	$ 2,772.84
	Station	13,758.44	15,822.75	15,762.75
Poultry Husbandry	R. I.	$ 931.32	$ 1,121.41	$ 167.20
	Station	42,659.13	39,402.18	45,183.19
Soils	R. I.	$ 453.39	$ 832.57	$ 875.97
	Station	15,295.35	18,560.86	25,736.53
Veterinary Medicine	R. I.	$ 645.74	$ 83.59	$ 11.00
	Station	15,453.27	14,555.94	19,751.38
Farm Maintenance		$161,352.29	$172,784.67	$191,251.24

Major Items of Equipment

Major items of equipment purchased or acquired by departments within the School of Agriculture during the past three year period (items with a value of $1,000.00 or more) are:

Agricultural Engineering:	Do-All Metal cutting board saw	$ 1,630.00
	Multipoint Recorder	$ 2,051.90
Dairy and Animal Husbandry:	Jersey Bull	$ 1,500.00
	Platform Scale	$ 2,053.05
	Platform Scale	$ 1,000.00
	Wool Carding Machine	$ 1,870.00
	Grain Bins	$ 1,190.00
	Hereford Bull	$ 2,000.00
	*Sealer Assembly	$ 1,533.13
Farm Crops:	*Warburg Apparatus	$ 1,700.00
	Seed Germinator	$ 1,350.00
Fish and Game Management:	*Terra Cruiser Trailer	$ 1,950.00
	*Panel Truck	$ 1,911.56
	*Water Tank	$ 1,200.00
	*Microscope	$ 1,004.04
	*Aquarium	$ 1,000.00
Food and Dairy Technology:	*Chromatographic Gas Instrument	$ 1,389.96
	Bacteriological Incubator	$ 1,400.00
	Steam Boiler	$ 1,200.00
	Recorder Autograf	$ 1,203.50
	Spray Dryer	$ 5,166.81
	Spectroreflectometer	$10,325.00
Horticulture:	Irrigation Equipment	$ 2,100.00
	Speed Sprayer	$ 4,188.00
	Chem. Table	$ 2,311.00
Poultry Husbandry:	Autoclave	$ 1,000.00
Soils:	*Portable Scaler	$ 1,290.46
	X-Ray Diffraction Unit	$ 2,113.43

* Gift Funds

Tabulation showing total value of equipment and acquisitions by the Federal Cooperative Service during the past three years:

1956-57	$ 69,699.25
1957-58	61,382.38
1958-59	48,575.38

Major items of equipment ($1,000.00 or more in value) purchased by the Extension Service during this same period of time are as follows:

1956-57	34 vehicles*	$ 51,175.99
	1 motion picture film	1,140.89
1957-58	38 vehicles*	56,453.33
1958-59	22 vehicles*	37,755.75
	1 motion picture film	1,213.43
	1 Multigraph	2,096.75

* Joint with Experiment Station

LIBRARY

Only in a few instances do departments within the School of Agriculture attempt to maintain any semblance of a departmental library. Where such is the case it is for the convenience of the staff and students and is maintained in complete cooperation with the college library. Small libraries will be found with the holdings indicated in the following departments:

A. Agricultural Economics

Classification	Total No. of Volumes	No. Volumes Accessioned 1956-57	1957-58	1958-59
A	1	-	-	1
B	-	-	-	-
C	-	-	-	-
D	5	2	1	2
E-F	20	5	7	8
G	5	-	3	2
H	93	20	40	33
J	4	-	3	1
K	45	10	15	20
L	79	19	25	35
M	-	-	-	-
N	3	-	1	2
P	8	2	2	4
Q	7	2	2	3
R	1	-	1	-
S	178	50	60	68
T	13	4	4	5
U	-	-	-	-
V	-	-	-	-
Z	3	1	1	1
TOTAL	465	115	165	185

B. Agricultural Engineering

Reading room with appropriate current periodicals.

C. Dairy and Animal Husbandry

Call No.	No. of Volumes	Volumes Obtained 1956-57	1957-58	1958-59
QC 770	1		1	
QD 1	25			
QH 1	9	1	1	1
QL 856	1		1	
QM 488	1		1	
QP	66			
QP 141	26	2	2	2
QP 187	2			
RC 889	13	2	1	1
S 17	2		1	1
S 21	34			
SF 1	4	1	1	1
SF 95	4	1		
SF 105	1			
SF 193	760	6	6	6
SF 196	1			
SF 199	13	1	1	1
SF 221	42	1	1	1
SF 239	2			2
SF 240	1			
SF 241	1			
SF 375	2	2		
SF 745	1			1
SF 761	1			1
SF 871	1			1
TOTAL	1014	17	17	18

D. Fish and Game Management

Maintains a reading room with rather extensive holdings of appropriate periodicals, journals, bulletins, circulars, reprints and mimeographed reports.

E. Food and Dairy Technology

Call No.	1956-57	1957-58	1958-59
HD	69	73	84
QD	123	273	232
QP	36	48	44
R	5	5	3
SF	150	210	143
TP	80	51	89
TX	29	31	26
Z	3	3	4

F. Horticulture

Maintains a reading room with appropriate periodicals and a limited number of books on loan from the college library.

G. Soils

Maintains a reading room with appropriate periodicals, journals and U. S. D. A. Soil Survey Reports.

RECORDS AND REPORTS

A complete and up-to-date file on each student's academic record is maintained in the office of the Dean of Agriculture. A folder is kept for each student in which there is a photostatic copy of the official record. This is renewed each year, bringing the record up to date. At the end of each term a copy of the Grade Report is received for each student. These are kept on file -- one report for Fall term, one for Winter term, and one for Spring term.

Records for students not graduating are retained for ten years. Records of those graduating from the School of Agriculture are permanent. A complete academic record is available for all graduates of Agriculture since 1935.

Beginning with the 1959-60 school year, academic records are furnished each department. An additional photostatic copy of the official record is received from the Office of the Registrar for this purpose.

A complete card file, plus the permanent record, is available in the office of the Dean of Agriculture. The card file has the last known address of alumni.

Each department makes an effort to maintain a file of their alumni. In some cases the departmental file is more up to date than that in the Dean's office.

The Alumni Association has a record of all Agricultural students, whether graduated or not. This record is on IBM cards, and a complete listing, with last known address, is available on call.

In addition to information provided from the Dean's office on student records the following departmental reports on this topic will be of interest:

A. Agricultural Economics

An up-to-date folio is kept by advisors of each student. An alumni file is maintained by the department and is checked every five years by survey. A staff member is assigned the responsibility of keeping this current.

The department does not publish an alumni directory.

Most positions are filled on a personal basis through members of the department. Arrangements are made for periodic interviews with firms who are prospective employers of graduates.

A list of publications by staff is maintained by the department.

B. Agricultural Engineering

(1) An up-to-date record (folder) on each student is maintained within the department. These folders contain all pertinent information on the student such as grades on placement tests, notices of unsatisfactory work, if any, and a curriculum sheet recording the courses taken and grades received. These records are kept in the office of the advisors and as the student progresses through the various years in college, his record is passed on to subsequent advisors. Finally, the record is filed in the departmental office to be used later on when inquiries are received from employers concerning a particular student. Folders for the agricultural engineering graduates are filed in the office of the Dean of Engineering.

(2) An active alumni file is maintained within the department. The file is in small cabinets attached to the wall in the hall of the A. E. building. These cabinets are available for anyone to look at as he comes through the building. Each man has a card on which a record of his employment and personnel information is recorded. This record is kept current by surveys made periodically. The most recent one was completed in November 1959 for all the agricultural engineers.

The alumni file is maintained on post index cards. Four years ago a survey was made of all the MTA graduates and the information posted. From time to time as alumni return the department may have reason to revise these files. Advantage is taken of every possible opportunity to keep the file current.

(3) The department does not prepare and publish a departmental alumni directory. Its efforts are concentrated on keeping the alumni file in the department as current as possible.

(4) Placement procedure for departmental majors is done both at the departmental and at the school level through the office of the head counselors for the schools of Agriculture and Engineering. Through the large number of contacts which the department staff has with industry, governmental organizations and businesses, job opportunities are passed on to students. A record of the employers of departmental graduates is shown in the alumni file.

(5) No departmental record is kept of the publications of the staff. Once a year, however, the staff is polled by the central library for information concerning publications during the current year.

C. Dairy and Animal Husbandry

(1) An up-to-date file on each student's academic record is maintained within the department.

An individual folder is kept on each graduate and undergraduate major in the department. A record of his class schedule is kept at registration and his grades are recorded on his degree plan at the end of each quarter. All communications and records of student counseling are filed in the student's folder. At the end of the school year a photostatic copy of his official record from the Registrar's Office is filed with each student's record.

(2) An alumni file is being started. In the 1958-59 academic year all records available were assembled and found incomplete and inaccurate. Alumni lists by classes were prepared and mailed to a selected list from each class requesting they provide missing information, correct errors and return. Excellent cooperation from alumni has added materially to the files and all alumni will receive a departmental newsletter and Christmas greeting in December, 1959.

(3) Members of the faculty are not aware of a departmental alumni directory, other than the incomplete list circulated recently. It is the department's aim to include such a list each year with the departmental news letter requesting corrections and return.

(4) Placement procedures for departmental majors are not well organized. This area needs study and will receive attention during the current year.

(5) A record of publications by staff members is maintained and is kept current by adding to the list at the end of the year.

D. Farm Crops

(1) An up-to-date file of each student's academic record has not been maintained continuously. However, recently, with the advent of a new service rendered by the Dean's office, it will now be possible for the

department to keep this accurately, and such a file is being established.

(2) An alumni file is maintained in the department.

(3) The alumni directory has not been published regularly.

(4) The department assumes considerable responsibility for placing departmental majors, and records of their initial positions are kept and subsequent ones if such information is made available to it.

(5) A record is kept of the list of publications of the staff in the department.

E. Fish and Game Management

(1) A record of academic progress is kept in each student's personnel envelope. Data sheets indicating courses taken and grades earned are provided for this purpose.

Records are kept current by a part-time personnel secretary who transfers academic data provided by the Office of the Registrar to the student's file at the termination of each quarter's work.

(2) Each student's personnel records are transferred to an alumni file upon his or her graduation. Contained in the records are personal, educational and placement data, a picture, information concerning extra-curricular activities and job performance evaluations of seasonal employment in the wildlife field during the student's college training period.

(3) An alumni directory for the Department of Fish and Game Management was published and distributed in 1958.

(4) The Department of Fish and Game Management offers professional counseling in employment opportunities for its students and graduates. Prospective employees are invited to the campus and interviews with interested students arranged. A file of employment contacts and job vacancies is maintained along with application blanks and forms. Effort is made to have civil service and federal examinations for wildlife careers given on the campus.

(5) A list of publications covering the past ten years is maintained for all staff members.

F. Food and Dairy Technology

(1) An up-to-date file of each student's academic record is maintained within the department. The file is brought up to date after each term.

(2) An alumni file is maintained within the department.

(3) A department alumni directory has not been published.

(4) One staff members is appointed by the department head to handle inquiries concerning summer and permanent job placement. This service is for both majors and minors. Summer placement records are kept in each student's file. Permanent placement is recorded in the alumni file and an attempt is made to keep this up-to-date.

(5) A card file of publications of staff members is maintained within the department. This is brought up-to-date once a year, and shows the type of publication (technical, review, popular, etc.) A study of department publications was made in 1958.

G. Horticulture

(1) Each faculty advisor maintains an up-to-date file of each student's academic record. Duplicate grade slips from Registrar's Office are obtained and this information recorded on forms appropriate to the specific curriculum of the individual student.

(2) Alumni file - was maintained until a few years ago. At present this file is not maintained.

(3) An alumni directory has not been published for at least ten years.

(4) Responsibility for placement is primarily on a sectional basis. Vegetable Crops section, for example, is responsible for placement of students majoring in vegetable crops. Records are kept on the same basis.

(5) Publications list of staff members now maintained and established as of 1955.

H. Poultry Husbandry

(1) An up-to-date file of each major student's academic record is maintained within the department. Copies

of grade sheets sent from the Dean's office are used to keep students' records up-to-date.

(2) A record of department alumni is maintained within the department.

(3) The department has not published an alumni directory in the past 13 years.

(4) Most departmental majors are placed by the department - usually by the department head. Their last known position is shown along with address on the alumni records. A file is maintained of positions available.

(5) Each staff member maintains a list of publications which is submitted to the library annually for listing in Faculty Publications by Oregon State System of Higher Education which is published biennially. These publications are filed in the department.

I. Soils

(1) An up-to-date file of each student's academic record is maintained by the counsellor. Copies of the student's academic record are obtained each quarter. These records along with other counselling information are ultimately filed in the departmental office when the student graduates.

(2) An alumni file is maintained utilizing a card system mounted on the wall in the main office. The student's record card is started at the time that he graduates and new information is added from time to time as it becomes available.

(3) For the past several years the alumni directory has been published annually in the Loess Auger, the OSC Soils Club Newsletter. Since this has been sent to all alumni, it has been possible to improve and keep our alumni directory more up to date.

(4) The staff takes a direct interest in assisting students obtain employment upon graduation. For placement of undergraduate students, liaison is maintained with Mr. Langan, Advisor for the School of Agriculture. Many undergraduate students have accepted employment as soil surveyors in the Soil Conservation Service or in industry, especially those handling fertilizers. Individual members of the staff maintain close contact regularly with these groups in the normal course of their activities.

Graduate students have been encouraged to develop and duplicate a record of their personnel information to be sent to prospective employers. All counselling information and personnel information on an individual student, either graduate or undergraduate, is maintained by the counselor until the student graduates. At this time the records are transferred to the departmental files. A continuing record of the graduate's activities is maintained on the alumni card file.

(5) One assembled set of all publications by the members of the Department of Soils staff, as well as other OSC publications dealing with soils, is maintained within the department. A departmental manuscript file is maintained for publications during the time they are being processed.

As indicated in the preceding departmental reports, placement activities for graduates from the School of Agriculture are for the most part decentralized and somewhat uncoordinated. Employers may have contact with the departments and/or the Office of the Dean of Agriculture. There is no central file or record on placement of students, nor does the School of Agriculture have such information about employers of students majoring in some area of agriculture.

From the foregoing reports it will be apparent that there are no "best features". The limitations are many and various -- namely, continuity and follow-up -- both of employers and alumni.

Time, money and facilities would be important in accomplishing a reasonable and thorough job in this area. Such could and would be done if these elements were available.

A centralized placement bureau, working with the schools and departments, would be of much value. Such services would afford a facility for all inquiries and interviews. In using a central placement bureau, it would be necessary to establish and maintain good lines of communication between schools and departments.

The School of Agriculture would not want to lose contact with employers, and a centralized placement service should not endanger the present status with them. In general, centralization of placement activities would be of considerable help to the School of Agriculture.

CURRICULUM

Scope and Content of Studies Including Addition and Discontinuance of Courses

In 1953 a program designed to bring about a greater interest in the total educational needs of students enrolled in agriculture was undertaken. This was directed largely at involving departmental heads with the hope that faculty interest and participation in curricula studies would ensue. A good deal of attention and thought was focused on this area of responsibility following a written and oral report on the need for certain changes presented by student members of the Oregon Chapter of Alpha Zeta. From the considerations that followed certain desirable curricula adjustments were made. The effect of such changes was rather limited and a thorough study of the total problem was not seriously undertaken.

As pointed out earlier in this report an intensive study and review of the educational needs of students in agriculture was launched with the appointment in January, 1958, of a School Curricula Committee. In addition to the areas of study previously referred to, this committee conducted an extensive appraisal of the thoughts of undergraduates, graduates, faculty members and people closely associated with agriculture on educational needs of students enrolled in this subject area. A major segment of the study to date has been an analysis of some 1695 questionnaires returned from 3200 sent out. Answers were obtained on such subjects and questions as follows:

1. Academic education and/or training of individuals who returned the questionnaire.

2. Usefulness of courses in college including value of introductory courses in Agriculture.

3. Importance of students in agriculture being required to take course work in most, if not all, departments.

4. Importance of course work in specific subject areas with respect to the respondent's present position and for those to come who will be expected to move into the same or similar positions.

5. Should more or less student time be devoted to mastering fundamentals in physical and biological sciences?

6. When should a student in Agriculture select and start concentrating his or her efforts on a major or move into departmental specialization?

7. Importance or value of an "orientation" course in agriculture.

8. Were there sufficient electives?

9. Was there adequate advice and counseling?

10. Where did the respondent obtain information that helped most in deciding on his or her major field of work in college?

11. Should an "honors" program be developed?

12. When and where should skills, practices and applications be acquired?

From information obtained through various activities, members of the committee have prepared a first draft of their findings and presented it to all members of the faculty for consideration. This first draft proposes some rather extensive modifications in patterns of education as they now exist in the School of Agriculture. For this reason a great deal of thought and attention will be required on the part of the total faculty before sound reactions can be obtained. It is the intention of members of the Curricula Committee to keep pressing for decisions so that they may finalize their initial recommendations and present them to the Dean of the School of Agriculture by June, 1960. The efforts of the committee will unquestionably bring about rather specific and desirable improvements in curricula. Already beneficial effects of their activities are being reflected through increased interest of departmental faculties in courses, their content and place in the educational needs of students. A few minutes spent with departments discussing the subject of curricula will reveal faculty interest in this rather important segment of their total responsibility. The following departmental statements will also provide the reader with further clues on the interest and activities associated with the topic of Curricula:

A. Agricultural Economics

The department has a Curriculum Committee which meets at least bi-monthly concerning revisions, additions or deletions of curricula.

(1) one member works directly with the Business School

(2) one member works directly with the Economics Department

(3) one member works directly with the production departments

Graduating seniors are asked for a careful evaluation of courses taught and instructors are encouraged to use student evaluation forms for each course taught.

All curricula matters are discussed freely in staff meetings before action is taken.

B. Agricultural Engineering

The Agricultural Engineering department has two curriculum committees, one for AE and one for MTA, of staff members whose assigned responsibility is to analyze, add and delete course offerings, and in general, constantly strive to keep the curriculum up to date and abreast of developments.

(1) The department takes the initiative in requesting course additions or deletions to a curriculum. Such requests are then passed on to the Dean concerned and then through proper channels to the curriculum committee of the institution for consideration.

(2) Requirements for course offerings are presented to the departmental staff by the curriculum committees. Determination of requirements is based upon the subject matter needs of the student to prepare him for job opportunities and good citizenship.

(3) The curriculum committees have a continuous responsibility to maintain and handle all matters relative to curricula. Regular and special meetings are held throughout the year resulting in good continuity of approach on all curricular matters.

(4) The committees make use of undergraduate and graduate reactions to course offerings. Members of the faculty draw heavily upon alumni surveys for comments and reactions concerning course content and the adequacy, or lack thereof, of the two curricula to meet needs of graduates in professional life.

C. Dairy and Animal Husbandry

The department has a curriculum committee composed of three staff members, each of whom represents one of the three segments of the department -- dairy, animal husbandry and range management. While the personnel of the committee is not necessarily permanent, a minimum of turnover is desired.

(1) Courses to be added or discontinued are so recommended by the curriculum committee and if approved by a two-thirds majority of the departmental staff, the recommendation is then made to the Dean of the School.

(2) Requirements are determined only after a long and involved process which may include discussion in staff meetings, surveys of departmental alumni, conferences

with industry, discussions at professional meetings, inter-departmental conferences, total agricultural staff conference discussions and others.

(3) Although the curriculum committee is charged with continuous responsibility for curricula matters, every staff member is encouraged to make recommendations and suggestions to the committee.

(4) Limited use is made of senior students' reactions in effecting curriculum modifications.

D. Farm Crops

Committees or individuals are constantly studying curriculum changes within the department. Currently, two committees are working on various changes that appear to be necessary in course structure, name, etc., and another committee is studying the reaction of the alumni to courses which they have taken and to collect ideas on suggested changes which they might have.

(1) Courses are added and discontinued on the basis of recommendation from sub-committees to the Resident Instruction staff, and after a discussion and a vote on the matter by the staff.

(2) Requirements are determined by the needs of industry, research, and teaching. These are brought up to date by frequent discussions in staff meetings.

(3) Curriculum matters are considered continuously from time to time as it would seem appropriate to give them serious consideration.

(4) Some use has been made of student initiative and reactions effecting curriculum modifications.

E. Fish and Game Management

The resident instruction staff as a whole serves as a curriculum committee. Courses are added or discontinued on basis of need for and adequacy of instruction regarding subject matter under consideration; current developments in the wildlife conservation field; evaluations of knowledge obtained by students and student or alumni recommendations.

Curriculum requirements are established within the minimum total hours set forth by the School of Agriculture.

Department policy is to require at least one departmental course during each academic year of a student's tenure. Fish and game courses are supported by required studies in agriculture, science, communications and social sciences in a manner designed to give breadth and balance to the background essential in this field. Additional elective hours are provided to allow for individual student interests.

The curricula are subject to periodic revisions as reflected by alumni contacts, prospective employers and counsel with senior students.

F. Food and Dairy Technology

The department has an undergraduate curriculum committee and a graduate curriculum committee. One member is on both committees to act as a liaison.

(1) Recommendations with respect to the addition or discontinuation of courses are made by the committees to the department head. He in turn presents these recommendations to the full staff for further discussion and for a vote before a definite decision is made as to whether the recommendations should be sent to the Dean.

In 1957-58 the department head visited seven land-grant colleges and universities throughout the United States and presented the staff-proposed combined curriculum in Food and Dairy Technology to comparable staffs there. On the basis of the favorable reception the curriculum was recommended to the Dean and adopted.

(2) Department requirements are determined by using all sources of information available to the committees, i.e. recommendations from professional societies, employers, graduates, students, staff, universities, etc.

(3) Curricula matters are of a continuous nature with a part of each committee being replaced each year.

(4) Student opinions are welcomed but the opinions are of more value after the persons have been employed a few years.

G. Horticulture

Courses added or discontinued are the responsibility of the entire staff of this department. Specific courses of a particular curriculum are the responsibility of the staff of the section involved (pomology, vegetable crops, etc.)

Course requirements are determined by members of the academic staff and proposed changes are recommended to Dean of the School for approval.

Responsibility in a large measure is continuous.

Occasional discussion of students' reactions are held. Certainly, student reaction is not ignored in effecting curriculum modifications.

H. Poultry Husbandry

(1) The ideas for adding or dropping a course may come originally from staff members or the department head. Staff members directly involved as well as others are consulted about the change. As the department staff is small (5) it usually operates as a committee. If a change is thought desirable at the department level, it is submitted to the Dean's Office to be brought before the Curriculum Council.

(2) Certain requirements are those of the College and School of Agriculture. Others are those of the department and they are determined by the department staff serving as a committee.

(3) Continuous and periodic responsibility for curricula matters rests with the department serving as a committee.

(4) Since there are a considerable number of hours of electives in the curriculum in poultry husbandry, student initiative and reaction play a part in choosing these electives. Reactions of students have been considered in proposed curricular changes. Thinking and advice of alumni and industry also have been sought.

Specific examples - courses P 413. Poultry Nutrition; P 442. Poultry Breeding; and P 451. Commercial Practices were added because of requests from students -- particularly graduate students.

I. Soils

The entire resident instruction staff is considered to have responsibility for curricula within the department. The department head has asked one member of the resident instruction staff to give particular attention and leadership to consideration of both curricula and other resident instruction matters. During the past six years a great deal of study has been given to this matter. It is currently receiving additional attention in connection with the School of Agriculture Curriculum Committee.

Since the Department of Soils has a young staff with experience from many institutions in the United States, New Zealand and Canada, they have been able to draw on their own experience. Studies have been made of curricula and course offerings at other institutions in the United State two different times during the past six years. Close contact has been made with the National Committee of the Soil Science Society of America, which has studied and suggested the minimum requirements for a technical soils curriculum.

Courses are added or discontinued only after thorough consideration by the staff as to their need to aid students in achieving their objectives and goals. The requirements of particular course offerings are largely suggested by the staff member responsible but are reviewed by the entire staff. Curriculum matters get some consideration annually at the time material is prepared for the College Catalog. Any major changes have been preceded by several months of intensive study. Informal student reaction to curricula and course offerings in the Department of Soils and other departments are obtained regularly in counseling and otherwise. Organized group reactions of students on possible curriculum modifications have been obtained only infrequently.

J. Veterinary Medicine (does not offer courses for D.V.M. degree)

The courses in Veterinary Medicine have been developed largely by consultation with the staff of other departments who considered it desirable for their majors to be broadened by some knowledge of veterinary subjects. Courses have been added or adjusted after consultation with staff members of other departments in order to more appropriately provide the broadening knowledge that is desired for those majoring in other departments.

Study Requirements

Undergraduate students enrolled in agriculture at Oregon State College are required to meet the following minimum requirements for a Bachelor of Science degree:

English Composition	9 quarter credits
Physical Education	5 quarter credits
General Hygiene	1 quarter credit
Military Science	6 quarter credits

Science & Social Science	45 quarter credits
Approved Science courses	(9 quarter credits)
Approved Social Science courses	(9 quarter credits)
Upper Division courses	45 quarter credits
Agriculture with at least 24 in Upper Division courses	36 quarter credits
After receipt of senior standing	45 quarter credits
Total required for graduation	192 quarter credits

Within this rather general framework of requirements for the Bachelor of Science degree, departments that make up the School of Agriculture may establish more specific requirements for those students who wish to major in their particular subject areas. This is done through curricula or course patterns that must meet with the approval of the Dean, the Council on Curriculum and Academic Policy, the Faculty Senate and finally, the Oregon State Board of Higher Education by way of the President and the Chancellor. Such requirements may be noted in the published curricula as shown on pages 206 to 215 in the 1959-60 Oregon State College Bulletin.

Subject Areas

Students enrolled at Oregon State College may complete requirements for a Baccalaureate, Master, or Doctor of Science degree in one or more of the following subject areas:

Subject Area	Baccalaureate Degree Through the School of Agriculture,	Advanced Degrees Through the Graduate School
Agricultural Economics	B.S.; B.Agr.	M.S.; M.Agr.; Ph.D.
Agri. Business Management	B.S.; B.Agr.	M.S.; M.Agr.; Ph.D.
Farm and Ranch Management	B.S.; B.Agr.	M.S.; M.Agr.; Ph.D.
Agricultural Education	B.S.	M.S.; M.Agr.
Animal Husbandry	B.S.	M.S.; M.Agr.; Ph.D.
Dairy Technology	B.S.	M.S.; M.Agr.; Ph.D.
Dairy Husbandry	B.S.	M.S.; M.Agr.; Ph.D.
Farm Crops	B.S.	M.S.; M.Agr.; Ph.D.
Fisheries	B.S.	M.S ; M.Agr.; Ph.D.
Food Technology	B.S.	M.S.; M.Agr.; Ph.D.
General Agriculture	B.S.; B.Agr.	
General Agriculture with minor in Journalism	B.S.; B.Agr.	
General Agriculture-Pre-theological	B.S.	
Genetics	--	M.S.; Ph.D.
Horticulture	B.S.	M.S.; M.Agr.; Ph.D.

Subject Area	Baccalaureate Degree Through the School of Agriculture	Advanced Degrees Through the Graduate School
Pomology and Vegetable Crops	B.S.	M.S.; M.Agr.; Ph.D.
Floriculture and Nursery Management	B.S.	M.S.; M.Agr.; Ph.D.
Landscape Construction and Maintenance	B.S.	M.S.; M.Agr.; Ph.D.
Mechanical Technology in Agriculture	B.S.; B.Agr.	M.S.
Poultry Husbandry	B.S.	M.S.; M.Agr.; Ph.D.
Range Management	B.S.	M.S.
Soils	B.S.	M.S.; M.Agr.; Ph.D.
Veterinary Medicine	--	M.S.
Wildlife Management	B.S.	M.S.; M.Agr.; Ph.D.

Courses Offered During Current Year

Courses offered by departments within the School of Agriculture during the current academic year are as follows. Frequency of offering is shown by F (Fall Term) W (Winter Term) or S (Spring Term).

A. Agricultural Economics

AEc 111	Introduction to Agricultural Economics	F	W	S
AEc 211	Principles of Farm Management	F		S
AEc 311	Farm Income Tax Management			S
*AEc 331	Food and Agriculture	F		
AEc 341	Principles of Agricultural Marketing	F	W	
AEc 342	Agricultural Cooperation			S
AEc 407	Seminar	F	W	S
AEc 411	Agricultural Policy			S
AEc 414	Farm Organization	F		
AEc 418	Federal Programs and the Farmer		W	
AEc 421	Marketing Efficiency Analysis		W	
AEc 425	Agricultural Appraisal			S
AEc 431	Agricultural Finance			S
AEc 440	Livestock Economics	F		
AEc 451	Agricultural Prices	F		
*AEc 461	Conservation of Agricultural Resources		W	
AEc 462	Agricultural Land Economics		W	
AEc 507	Seminar	F	W	S
AEc 520	Research Methodology		W	
AEc 521	Agricultural Production Economics	F		
AEc 522	Agricultural Production Economics		W	
AEc 523	Analysis of Agricultural Policies			S

* Alternate Years

AEc 572	Advanced Agricultural Marketing	F
AEc 573	Agricultural Price Analysis	F

B. Agricultural Engineering (School of Agriculture)

AE 101, 102,103	Mechanical Problems in Agriculture	F W S
AE 211	Agricultural Engineering Survey	F W S
AE 213	Mechanical Application in Agriculture	S
AE 221	Farm Mechanics	F W S
AE 222	Farm Mechanics	S
AE 311	Farm Motors and Tractors	F W S
AE 312	Automobile Mechanics	F
AE 313	Automobile Mechanics	F W S
AE 314	Automobile Mechanics	S
AE 319	Land Drainage	S
AE 321	Pumps and Irrigation Equipment	F
AE 331	Farm Electricity	W
AE 341	Use of Explosives	W
AE 351	Food Plant Graphics	W
AE 352	Food Plant Mechanics	W
AE 361	Farm Buildings	S
AE 371	Seed Processing	F
AE 381, 382,383	Farm Skills	F W S
AE 391	Farm Implements	F S
AE 407	Seminar	F W
AE 435	Household Utilities	S
AE 451	Rural House Planning	W

C. Dairy and Animal Husbandry

DAH 121	Introduction to Dairy and Animal Husbandry	F W S
DAH 131	Judging and Selection	F W
DAH 231	Stock Judging	S
DAH 311	Animal Nutrition I	F
DAH 316	Animal Breeding	W
DAH 320	Herd Records	W
DAH 321	Dairy Cattle Judging	S
DAH 322	Dairy Herd Management	F
DAH 331	Types and Classes of Livestock	W
DAH or FC 341	Range Management	F W
DAH or FC 342	Range Improvement	W
DAH 351	Meats	F S
DAH 407	Seminar	F W S
DAH 411	Animal Nutrition II	F
DAH 412	Livestock Feeding	W
DAH 413	Dairy Cattle Feeding	S
DAH 414	Breeding Dairy Cattle	W

*DAH 421	Horse Husbandry	F		
DAH 422	Sheep Husbandry		W	
DAH 423	Swine Husbandry		W	
DAH 424	Beef Cattle Husbandry			S
DAH 425	Dairy Cattle Judging	F		
DAH 426	Stock Judging	F		
DAH 427	Artificial Insemination of Dairy Cattle		W	
*DAH 432	Milk Secretion			S
DAH or FC 441	Range Methods			S
DAH or FC 443	Range Management		W	
DAH 473	Livestock Genetics			S
DAH 476	Reproduction Problems			S
DAH 481	Wool and Mohair	F		
DAH 483	Wool Technology			S
DAH 507	Seminar	F	W	S
*DAH 573	Physiology of Reproduction in Domestic Animals			S
Gen 507	Seminar (Genetics)	F	W	S

D. Extension Methods

EM 411 *412	Extension Methods		W	

E. Farm Crops

FC 111	Elements of Agronomy I	F	W	S
FC 211	Elements of Agronomy II	F		S
FC 311	Potato Growing		W	
FC 313	Lawns and Turfs		W	
FC 317	Weed Control			S
FC 318	Wildlife Food Crops		W	
FC 322	Cereal Production Lectures		W	
FC 323	Cereal Morphology		W	
FC 324	Forage Crops			S
FC 331	Seed Testing		W	S
(FC or (DAH 341	Range Management)	F	W	
(FC or (DAH 342	Range Improvement)		W	
FC 407	Seminar	F	W	S
FC 411	Crop Inspection		W	
FC 414	Seed Production	F		
FC 415	Plant Breeding			S
FC 419	Industrial Crops		W	
(FC or (DAH 441	Range Methods)			S

* Alternate Years

(FC or (DAH 443	Range Management)		W	
FC 507	Seminar	F	W	S
FC 515	Plant Breeding	F		
FC 516	Field Plot Technique			S
FC 517	Plant Genetics		W	
*FC 518	Herbicides and Plant Growth Regulators	F		
FC 520	Conservation Cropping	F		
FC 521	Crop Production			S
(FC or (DAH 541	Range Research Methods)			S

F. Fish and Game Management

FG 251, 252	Wildlife Conservation	F	W	
FG 261	Wildlife Technique	F		S
FG 274, 275,276	Economic Ichthyology	F	W	S
FG 281, 282,283	Wildlife Management	F	W	S
FG 310, 311,312	Forest Wildlife Management	F	W	S
FG 319	History and Literature of Wildlife Management		W	
FG 320	Rodent Control Methods			S
FG 341	Fish and Game Law Enforcement		W	
FG 407	Seminar	F	W	S
FG 451, 452,453	Management of Game Birds	F	W	S
FG 454, 455,456	Management of Game Fish	F	W	S
FG 457, 458	Management of Big Game	F		S
FG 460	Management of Fur Bearers		W	
FG 464, 465,466	Commercial Fisheries	F	W	S
FG 507	Seminar	F	W	S
FG 567, 568,569	Fisheries Research Methods	F	W	S
FG 570	Pollution Problems in Fisheries		W	
Z 571, 572,573	Ichthyology	F	W	S

G. Food and Dairy Technology

FDT 111	Food and Dairy Technology		W	
FDT 221, 222,223	Food and Dairy Technology	F	W	S

* Alternate Years

FDT 271	Food Grades and Standards	F		S
FDT 310	Market Milk	F		
FDT 311	Food Mfg. Plants and Equipment	F		
FDT 318	Judging Dairy Products	F		
FDT 340	Food Industry Survey	F		
FDT 342, 343	Food Science		W	S
FDT 350	Principles of Food Preservation	F		
FDT 372	Extraneous Materials in Foods			S
FDT 407	Seminar	F	W	S
FDT 412	Detergency and Waste Disposal		W	
FDT 413	Laboratory Methods			S
FDT 417	Dairy Foods			S
FDT 421	Federal and State Food Regulations			S
FDT 423, 424	Food Analysis		W	S
FDT 430	Utilization of Dairy Products			S
FDT 431	Food Packaging	F		
FDT 433	Heat Transfer in Food Manufacturing			S
FDT 507	Seminar	F	W	S
*FDT 511	Food Industries Research Methods		W	
*FDT 542	Food Fermentation			S
*FDT 551	Thermal Processing of Canned Foods	F		

H. Horticulture

Hrt 111	Elements of Horticulture	F	W	S
Hrt 151	General Floriculture		W	
Hrt 253	Flower Arrangement	F		S
Hrt 311	Plant Propagation		W	
Hrt 315	Basic Horticulture	F		
Hrt 317	History and Literature of Horticulture		W	
Hrt 333	Fruit and Nut Production			S
Hrt 341	Principles of Vegetable Gardening		W	
*Hrt 342	Commercial Vegetable Production			S
Hrt 351, 352,353	Commercial Floriculture	F	W	S
Hrt 355	Herbaceous Plant Materials			S
Hrt 361, 362	Nursery Management	F	W	
Hrt 407	Seminar	F	W	S
Hrt 413	Horticultural Plant Breeding			S
Hrt 415	Spraying, Dusting and Distribution		W	
*Hrt 433	Systematic Pomology	F		
Hrt 441	Vegetable Handling and Distribution		W	
*Hrt 443	Systematic Vegetable Crops	F		
Hrt 507	Seminar	F	W	S

* Alternate Years

*Hrt	511, 513	Horticultural Genetics Lectures	F	W	
*Hrt	512, 514	Horticultural Genetics Laboratory	F	W	
*Hrt	531	Fruit Handling and Distribution		W	
*Hrt	541	Vegetable Crop Problems	F		

I. Poultry Husbandry

P	121	Poultry Production	F	W	S
P	322	Brooding and Broiler Production			S
*P	341	Poultry Judging		W	
P	407	Seminar		W	S
P	411	Poultry Feeding	F		
P	412	Poultry Feeding Laboratory	F		
P	413	Poultry Nutrition			S
*P	421	Marketing Poultry Products	F		
*P	441	Poultry Breeding	F		
P	442	Population Genetics and Breed Improvement			S
P	451	Commercial Practices	F		

J. Soils

Sls	211, 212	Soils	F	W	
Sls	214	Forest Soils			S
Sls	311	Soil, Water and Irrigation	F		
Sls	314	Soil Management and Conservation			S
Sls	407	Seminar	F	W	S
Sls	412	Soil Chemistry	F		
Sls	421	Soil Physics	F		
Sls	422	Soil Physics Laboratory		W	
Sls	424	Soil Fertility Lectures		W	
Sls	425	Soil and Plant Analysis			S
Sls	432	Soil Survey			S
Sls	507	Seminar	F	W	S
*Sls	512	Soil Colloids		W	
*Sls	514	Forest Soils		W	
*Sls	521	Soil Physics			S

K. Veterinary Medicine

VM	311	Anatomy and Physiology of the Fowl		W	
VM	320	Anatomy of Domestic Animals	F		
VM	321, 322	Physiology of Domestic Animals		W	S

* Alternate Years

VM 341	Diseases of Livestock	F		
*VM 351	Diseases of Poultry			S
VM 355	Diseases of Game Birds			S
VM 361	Parasitic Diseases of Domestic and Game Animals		W	
VM 441, 442,443	Diseases of Livestock	F	W	S

Alternate Year Courses Scheduled to be Offered 1960-61

A. Agricultural Economics

AEc 412	Consumers and the Market
AEc 444	Marketing Dairy Products
AEc 562	Advanced Agricultural Land Economics

B. Dairy and Animal Husbandry

DAH 320	Herd Record Systems
DAH 352	Meat Identification and Selection
DAH 431	Pedigree Studies
DAH or FC 442	Range Management Planning
DAH 511	Animal Nutrition
FC 541	Range Research Methods
DAH 574	Growth in Domestic Animals

C. Food and Dairy Technology

FDT 441, 442,443	Dairy Products Processing
FDT 521	Color and Flavor Evaluation
FDT 523	Quality Control Methods and Systems
FDT 532	Edible Oils

D. Horticulture

Hrt 515	Methods of Research
Hrt 516	Horticultural Plant Nutrition Problems
Hrt 533	Fruit and Nut Production

E. Poultry Husbandry

P 321	Incubation
P 351	Turkey Management
P 431	Poultry Plant Management

F. Soils

Sls 513	Soil Fertility
Sls 522	Soil Physical Conditions and Plant Growth

* Alternate Years

Student Enrollment by Academic Areas

The number of students majoring in each subject area during the past four years (1956-57, 1957-58, 1958-59, and 1959-60 - Fall Term) is shown in the next table.

		FR.	SO.	JR.	SR.	TOTAL UNDER GRADS	GRAD	TOTAL
Common Freshman Year	1956-57	87	-	-	-	87	-	87
	1957-58	92	-	-	-	92	-	92
	1958-59	75	-	-	-	75	-	75
	1959-60	88	-	-	-	88	-	88
Common Sophomore Year	1956-57	-	95	-	-	95	-	95
	1957-58	-	75	-	-	75	-	75
	1958-59	-	69	-	-	69	-	69
	1959-60	-	50	-	-	50	-	50
Agricultural Economics	1956-57	-	10	8	6	24	19	43
	1957-58	-	8	12	13	33	24	57
	1958-59	-	10	10	11	31	16	47
	1959-60	-	8	6	8	22	24	46
Dairy and Animal Husbandry	1956-57	-	-	9	22	31	7	38
	1957-58	-	-	21	20	41	10	51
	1958-59	-	-	19	23	42	16	58
	1959-60	-	-	9	19	28	15	43
Farm Crops	1956-57	-	-	3	4	7	10	17
	1957-58	-	-	12	6	18	9	27
	1958-59	-	-	9	10	19	19	38
	1959-60	-	-	6	10	16	20	36
Fish and Game Management	1956-57	66	68	36	41	211	28	239
	1957-58	60	58	47	42	207	23	230
	1958-59	56	70	50	50	226	19	245
	1959-60	44	47	60	43	194	18	212
Food and Dairy Technology	1956-57	19	20	16	29	84	10	94
	1957-58	16	15	19	19	69	17	86
	1958-59	14	11	18	24	67	13	80
	1959-60	11	16	11	17	55	15	70
Pomology and Vegetable Crops	1956-57	-	-	1	6	7	2	9
	1957-58	-	-	8	4	12	3	15
	1958-59	-	-	3	8	11	3	14
	1959-60	-	-	5	4	9	6	15

		FR.	SO.	JR.	SR.	TOTAL UNDER GRADS	GRAD	TOTAL
Landscape-Floriculture	1956-57	4	14	4	17	39	-	39
	1957-58	6	7	8	10	31	2	33
	1958-59	4	6	9	11	30	-	30
	1959-60	1	6	8	8	23	-	23
Poultry Husbandry	1956-57	-	-	-	3	3	1	4
	1957-58	-	-	2	1	3	2	5
	1958-59	-	-	1	3	4	2	6
	1959-60	-	-	2	2	4	3	7
Range Management	1956-57	4	4	4	2	14	1	15
	1957-58	1	3	3	5	12	4	16
	1958-59	2	2	4	5	13	3	16
	1959-60	-	2	4	4	10	2	12
Soils	1956-57	-	-	3	3	6	20	26
	1957-58	-	-	6	5	11	19	30
	1958-59	-	-	7	6	13	19	32
	1959-60	-	-	5	6	11	23	34
Agricultural Education	1956-57	-	-	17	13	30	3	33
	1957-58	-	-	17	20	37	-	37
	1958-59	-	-	11	16	27	1	28
	1959-60	-	-	13	6	19	3	22
Mechanical Technology in Agriculture	1956-57	12	18	10	13	53	1	54
	1957-58	11	13	20	9	53	-	53
	1958-59	14	18	12	19	63	-	63
	1959-60	13	17	19	18	67	1	68
General Agriculture	1956-57	-	-	17	10	27	3	30
	1957-58	-	-	15	11	26	4	30
	1958-59	-	-	13	11	24	5	29
	1959-60	-	-	14	12	26	4	30
Genetics	1956-57	-	-	-	-	-	11	11
	1957-58	-	-	-	-	-	7	7
	1958-59	-	-	-	-	-	4	4
	1959-60	-	-	-	-	-	10	10

INSTRUCTIONAL STAFF

Personnel

1. Following is a presentation in an abbreviated form of the names of all staff members and the information requested in Report II pertaining to personnel under the heading "Instructional Staff".

INSTRUCTIONAL STAFF

Department: Administration

Faculty Member	Nature of Appointment	Tenure	Years of Service (OSC)	Years of Teaching or Professional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institutions	Graduate Work Beyond Highest Degree Held
F E Price	Prof 12 mo	I	37	38	.26	.37	.37[1]	BS OSC	
W T Cooney	Prof 12 mo	I	22	23	.50		.50	BS OSC MS OSC	
C W Smith	Prof 12 mo	I	32	39	.10		.90[1]	BS WSU	
W M Langan	Assoc Pr 12 mo	I	22	36	1.00			BS OSC	

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[1] Extension

INSTRUCTIONAL STAFF

Department: Agricultural Economics

Faculty Member	Nature of Appoint-ment	Ten-ure	Years of Service (OSC)	Years of Teaching or Profes-sional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institu-tions	Graduate Work Beyond Highest Degree Held
G B Wood	Prof 12 mo	I	9	19	.63	.37		BS UO MS OSC PhD U Wis	
G E Blanch	Prof 12 mo	I	15	19	.25	.75		BS Utah SU MS U Ill PhD Cornell	
G E Korzan	Prof 12 mo	I	10	13	.40	.60		BS S Dak St MA U Minn PhD U Minn	
H F Hollands	Prof 12 mo	I	9	29	.30	.65	.05[1]	BS U Minn PhD U Minn	
D C Mumford	Prof 12 mo	I	22	35	.13	.75	.12[1]	BS U Ill MS Cornell	Work on PhD Harvard
E N Castle	Prof 12 mo	I	6	11	.27	.69	.04[1]	BS Kans St MS Kans St PhD Iowa St	
G B Davis	Prof 12 mo	I	19	19	.13	.87		BS OSC MS OSC	1 year
M Becker	Assoc Pr 12 mo	I	11	11	.20		.80[2]	BS OSC MS OSC	
S Christensen	Assoc Pr 12 mo	I	4	11	.35	.60	.05[1]	BS Utah St MS Cornell PhD Cornell	
C V Plath	Assoc Pr 12 mo	I	12	18	.39	.57	.04[1]	BS ND Ag C MS U Vt PhD Cornell	

G R Sitton	Assoc Pr 12 mo	I	4			1.00		BS OSC PhD Stanford	
W G Brown	Assoc Pr 12 mo	I	4	8	.23	.77		BS Kans St MS Iowa St PhD Iowa St	
R D Langmo	Asst Pr 12 mo	I	11	13	.12	.88		BS OSC MS UCLA	U Wash
M J Conklin	Asst Pr 12 mo	I	21	35		1.00		BS Mont St	2 terms
C Sutherland	Asst Pr 12 mo	Y	1		.75*	.25		BS Idaho MF Idaho	
F Dickmann	Instr 12 mo	Y	8	8		1.00		BS OSC	
H Hutchings	Instr 12 mo	Y	5	5		.50	.50[3]	BS N Mex SU	3 yr OSC
D Tucker	Instr 12 mo	Y	1			.55	.45[3]		

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* Instructor Forestry
1 Ag Tech Adv
2 Extension
3 USDA

INSTRUCTIONAL STAFF

Department: Agricultural Economics

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

G B Wood

Graduate Specialization: Marketing

Memberships: Alpha Kappa Psi, Beta Alpha Psi, Delta Sigma Rho, Gamma Sigma Delta, Sigma Xi, Am Farm Econ Ass'n, Western Farm Econ Ass'n

Publications: Low Prices, High Costs--No Sure Solution in Election Year. THE WASHINGTON FARMER, April 19, 1955

Faith, Hope and Parity. COMMERCIAL WEST, July 2, 1955

Turkey Market Prospects for 1957. TURKEY WORLD, October, 1957

What We Will Sell in 1965. PROCEEDINGS 1957 NATIONAL AGRICULTURAL CREDIT CONFERENCE, Am Bankers Ass'n, Nov. 1957

Integration and the Feed Industry. FEEDSTUFFS, Dec. 27, 1958

Super Farming and the Sheep Industry. THE NATIONAL WOOL GROWER, May, 1959

Agricultural Banking--1965 Model. THE AGRICULTURAL BANKER, Sept. 9, 1959

G E Blanch

Graduate Specialization: Marketing

Memberships: Phi Kappa Phi, Alpha Zeta, AFEA, WFEA

Publications: Economics of Hog Production in Oregon Economic Survey of Pea-Tu Salting Industry 1956. Sta Bul 561. Joint author published by Ministry of Agriculture, Bangkok, Thailand

Some Requirements for Economic Growth. Journal of Agricultural Business Administration Club, Bangkok, Thailand

Economic Analysis of Kasetsart University Poultry Enterprise, 1956. Mimeographed, Kasetsart University, Bangkok, Thailand

The Future and Thailand's Agricultural Economy. Faculty of Agriculture Yearbook, Kasetsart University, Bangkok, Thailand

H F Hollands

Graduate Specialization: Marketing

Memberships: AFEA, WFEA

H F Hollands (Cont'd)

Publications: Pacific Northwest Wheat. Sta Bul 556.
What Is Marketing. Ext Bul 779.
Agricultural Marketing Handbook. Extension

G E Korzan

Graduate Specialization: Marketing and Statistics

Memberships: WFEA

Publications: Financing Oregon Cooperative Associations
Resource Use in Thailand. JOURNAL OF LAND ECONOMICS
Oregon Farms Generate Buying Power. Misc Paper, OSC
How Oregon Ryegrass Seed Growers View Their Price Problems
Change Demands Upon Cooperatives Resulting from a Changing Agricultural Economy
Impact of Transportation Rates on Oregon's Green Bean Industry. Cir of Info 599, Oct 1959.

D C Mumford

Graduate Specialization: Farm Management

Memberships: AZ, PKP, AFEA, WFEA, Am Soc of Farm Managers & Rural Appraisers

Publications: Cost of Producing Apples and Pears in the Hood River Valley, Oregon. SCI 548, 1955
Quality Milk--Does It Cost More to Produce? Sta Bul 551
Cost of Producing Apples and Pears, 1956. SCI 563
Cost of Producing Apples and Pears, Progress Report X, 1957. SCI 580
Charges for Commercially Applied Pesticides. Sta Bul 566 1958, co-author, M. L. Jernstedt
Pesticide Applications--Commercial Charges. Sta Bul 571
Quality Milk--Does It Cost More to Produce? HOARDS DAIRYMAN, March 25, 1956
All About Costs and Efficiencies in Hatching Egg Production. TURKEY WORLD, Oct 1957, co-author James A. Harper

E N Castle

Graduate Specialization: Production Economics

Memberships: AFEA, WFEA, Am Econ Ass'n, SX, GSD, AZ

Publications: Diversification--Does It Reduce Price Variation? Sta Bul 569, May, 1959, co-author Yu-Hsuen Mo

E N Castle (Cont'd)

Economics of Supplemental Irrigation on Polk County Farms. Misc Paper 39, April, 1957, co-author H. W. Caldwell

Figuring Cattle Feeding Profits for Eastern Oregon. Misc Paper 33, December, 1956, co-author L. T. Wallace

Profitable Use of Fertilizer on Native Meadows. JOURNAL OF RANGE MANAGEMENT, VOLUME II, Number 2, March 1958, co-author Michael Nelson

The Use of the Production Function and Linear Programming in the Valuation of Intermediate Products. LAND ECONOMICS, VOL 33, No 3, August 1957

Vertical Integration and Farm Management Research. JOURNAL OF FARM ECONOMICS, Vol XL, No 2, May 1958

G B Davis

Graduate Specialization: Marketing

Memberships: SX, WFEA

Publications: Seed Processing in the Willamette Valley, Misc Paper 81

Plant, Field Vining Costs Compared. OREGON'S AGRICULTURAL PROGRESS, winter 1959, co-author H Hutchings

Costs and Efficiencies in Pea Freezing Operations--Part I--Vining, Misc Paper 66; Part II--Packaging and Freezing, Misc Paper. Co-author H Hutchings

How to Improve Operating Efficiency in Food Processing Plants. Misc paper 77

Comparative Costs of Handling Winter Pears in Fiberboard and Wood Containers. Misc paper, co-author Lee Fortner

Labor Requirements of Different Methods. Misc paper 43. Co-authors R D Langmo and Lee Fortner

Description of Oregon Potato Shipments. Misc paper 13

Costs of Packing Potatoes in Klamath Farm Cellars. Cir of Info, 1956. Co-author F H J Dickmann

S K Christensen

Graduate Specialization: Marketing

Memberships: AFEA, WFEA

Publications: Milk Control Program N E State (Review & Appraisal)

Fixing Prices Charged Milk Dealers, Bul

Administrative & Legal Aspects Quantity Discount Pricing on Retail Milk Routes, Bul

Relative Cost of Serving Coffee and Milk in Oregon Restaurants, co-author J Colburn

Retail Sales of Non Fat Dry Milk, co-author D Oldenstadt

S K Christensen (Cont'd)

Fish Marketing and Consumption on the Pacific Coast. Co-authors R Boshell and F Faha

Trends in Federal Milk Marketing Orders. AMERICAN MILK REVIEW, Jan 1955

Coffee on the House--Milk on Your Bill. AMERICAN MILK REVIEW, Jan 1959

Future of Turkey Industry. TURKEY PRODUCER, Jan 1959

How Much Will Oregon Dairymen Get for Milk. OREGON FARMER, June 4, 1959

Some Economic Trends in the Dairy Industry. Proceedings 28th Annual Institute of Dairying, Wash St U, March 1959

Changing Patterns of Turkey Production. TURKEY PRODUCER, Dec 1959

Concepts of Marketing. CONFERENCE PROCEEDINGS--Committee on Ag Marketing Research. Dec 1957

C V Plath

Graduate Specialization: Land Economics

Membership: AFEA

Publications: Several Ag Exp Sta publications
4 Journal articles
2 bulletins and 1 journal article published in Thailand and Malaya

G R Sitton

Graduate Specialization: Production Economics

Memberships: AFEA, AEA, PKP, Catholic Econ Ass'n

R D Langmo

Graduate Specialization: Industrial Engineer and Marketing

Memberships: Am Inst of Ind Eng, Inc; Soc for the Advancement of Mgmt

Publications: Labor Requirements of Different Methods of Packing Pears in Polyethylene. Co-authors G B Davis, Lee Fortner
Influence of Bulk Bins on Winter Pear Damage. Misc Paper 82

M Becker

Graduate Specialization: Farm Management

Membership: WFEA

M Becker (Cont'd)

Publication: Egg Production Costs & Returns for Western Oregon, Sta Bul 559

W G Brown

Graduate Specialization: Production Economics and Statistics

Memberships: SX, PKP, GSD, AFEA, WFEA

Publications: Economics of Growing Malting Barley. Co-authors T L Jackson and W H Foote. PLANT FOOD REVIEW, Spring 1959

Market Potential for Protein Concentrate Produced from Fermentation of Spent Sulfite Liquor. Tech Bul 110, Nov 1958

A Method for Dealing with Time in Determining Optimum Factor Inputs. Co-author W G Arscott. JOURNAL OF FARM ECONOMICS, August 1958

Coordinated Research by the Subject-Matter Man and the Economist. Tech Paper 1166. Conference Proceedings, Farm Mgmt Research Comm, Pullman, Wn, August 1958

Production Functions from Data Over a Series of Years. Co-author M M Oveson. JOURNAL OF FARM ECONOMICS, May 1958

An Appraisal of the Soil Bank Program in the Wheat Summer Fallow Area in Oregon. Co-author P Weisgerber. JOURNAL OF FARM ECONOMICS, Feb 1958

Substitution Value of Barley and Fat for Corn in Broiler Rations. Co-author G H Arscott. Cir of Info 585, Nov 1957

Profitability of Fertilizing Wheat in Umatilla County. Co-author M M Oveson. Cir of Into 583, Oct 1957

Replacing Corn with Barley in Turkey Rations. Co-author J A Harper. Cir of Info 582, Sept 1957

The Use of the Production Function and Linear Programming in Valuation of Intermediate Products. Co-authors M Nelson and E Castle. LAND ECONOMICS, August 1957

Profitability of Field Crop Rotations in Umatilla County. Co-author M M Oveson. Cir of Info 573, March 1957

Production Functions, Isoquants, Isoclines, and Economic Optima in Corn Fertilization for Experiments with Two and Three Variable Nutrients. Co-authors E O Heady, J Pesek, J Stirtzel. Iowa Ag Exp Sta Bul 441, Aug 1956

Practical Application of Fertilizer Production Functions. Chapter 10, ECONOMIC ANALYSIS OF FERTILIZER USE DATA, 1956

Free Choice Versus Least-Cost Mixed Rations for Hogs. JOURNAL OF FARM ECONOMICS, Aug 1956

Economic Instability and Choices Involving Income and Risk in Livestock and Poultry Production. Iowa Ag Exp Sta Bul 431, July 1955. Co-author E O Heady

Crop Response Surfaces and Economic Optima in Fertilizer Use. Iowa Ag Exp Sta Bul 424, Mar 1955. Co-authors E O Heady, J Pesek

M J Conklin

Graduate Specialization: Ag Economics

Membership: WFEA

Publications: Oregon's Horticultural Specialty Business. Unpublished 5-page dittoed statistical summary

Homeowner Purchases of Nursery Stock. Unpublished summaries used for talks and short reports, manuscript under review

Holly Production and Sales in Three West Coast States. Preliminary reports, manuscript being prepared

Oregon Horticultural Specialty Crops Sold in Oregon in 1949. Unpublished paper

Oregon Horticultural Specialty Crop Acreages in 1955. Unpublished paper

Oregon's Horticultural Specialties Industry. Misc paper, Ore Ass'n of Nurserymen Convention Sept 1957

Oregon's Horticultural Specialties Industry. THE OREGON FLOWER GROWER, Sept 1957

Oregon's Horticultural Specialties Industry. THE O A N DIGGER, Nov 1957

Nursery Crops Lead Specialty Sales. OREGON ORNAMENTAL AND NURSERY DIGEST, Feb 1958

Oregon's Bulb Industry. Misc paper, Annual Mtg of Pacific Bulb Growers, Jan 1958

Holly Statistical Data and Marketing Problems. Misc paper, Annual Hort Specialties Short Course

How Homeowners Buy Their Trees, Shrubs and Garden Supplies. Misc paper, Hort Spec Short Course, Feb 1959

Report on Holly Acreage, Production and Sales in Oregon and Washington. Misc paper, Hort Spec Short Course, Feb 1959

Nursery Buying Habits Surveyed. OREGON ORNAMENTAL AND NURSERY DIGEST, March 1959

F H J Dickmann

Graduate Specialization: None

Membership: WFEA

Publications: Description of Oregon Potato Shipments. Misc paper 13. Co-author G B Davis, 1955

Costs of Packing Potatoes in Klamath Farm Cellars. Cir of Info 565. Co-author G B Davis, 1956

Buying Potatoes on a Sample Basis. Misc paper 60. Co-author G B Davis, 1958

Labor Saving in Onion Packing. OREGON VEGETABLE DIGEST, July 1958

Costs for Handling Onions. OREGON VEGETABLE DIGEST, April 1959

Harvey Hutchings

Graduate Specialization: Marketing

Memberships: None

Publications: Seed Processing in the Willamette Valley. Misc paper 81. Co-author G B Davis

Plant, Field Vining Costs Compared. OREGON'S AGRICULTURAL PROGRESS, winter 1959. Co-author G B Davis

Costs and Efficiencies in Pea Freezing Operations--Part I--Vining, Misc paper 66; Part II--Packaging and Freezing, Misc paper. Co-author G B Davis

How to Improve Operating Efficiency in Food Processing Plants. Misc paper 77. Co-author G B Davis

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INSTRUCTIONAL STAFF

Department: Agricultural Engineering

Faculty Member	Nature of Appointment	Tenure	Years of Service (OSC)	Years of Teaching or Professional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institutions	Graduate Work Beyond Highest Degree Held
J B Rodgers	Prof 12 mo	I	13	30	.45	.50	$.05^1$	BS (ME) MS (AE) AE Idaho	
H R Sinnard	Prof 12 mo	I	30	32	.15	.14	$.71^2$	BS Iowa St MS Iowa St	Arch Design
R N Lunde	Prof 10 mo	I	29	33	1.00			BS OSC	
M G Cropsey	Prof 12 mo	I	13	21	.25	.70	$.05^1$	BS Calif MS ND Ag PhD MSU	
J W Wolfe	Assoc Pr 12 mo	I	12	16	.30	.65	$.05^1$	BS SD St MS Idaho PhD USU	Adv Math
D E Kirk	Assoc Pr 12 mo	I	17	15	.51	.44	$.05^1$	BS OSC MS MSU	
L W Bonnicksen	Asst Pr 12 mo	I	8	8	.30	.64	$.06^1$	BS Iowa St MS Iowa St	Statistics, Struc Anal, Humanities
D R Long	Assoc Pr 12 mo	I	12	12	.65	.30	$.05^1$	BS OSC (2) MS OSC	
D E Booster	Asst Pr 12 mo	Y	3	5	.48	.47	$.05^1$	BS OSC MS OSC	Struc Anal Plant Sci
L V Christensen	Asst Pr 12 mo	Y	3	16	1.00			BS Nebr	Working MS
G E Page	Asst Pr 12 mo	I	10	19		.95	$.05^1$	BSA Wisc BS (ME)& MS at Purdue	Statistics

J E Schoof	Instr 12 mo	Y	2	5	.24	.61	.15[3]	BS Kans St	Working MS
W N Stammers	Instr 12 mo	Y	1	5			1.00[4]	BS Toronto MS Toronto	Working PhD
J E Berney	Res Asst 12 mo	Y	0	0		.50		BS OSC	Working MS

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[1] Ag Tech Adv

[2] .06 Ag Tech Adv, .65 Arch Dept

[3] .05 Ag Tech Adv, .10

[4] .20 Soils Dept, .80

INSTRUCTIONAL STAFF

Department: Agricultural Engineering

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

J B Rodgers

Graduate Specialization: Agricultural Waste Utilization

Memberships: Sigma Xi, American Society of Agricultural Engineers

Publications: A Report on Mechanical Harvesting of Bush Beans. Misc paper 70, Feb 1959

Annual reports Agricultural Engineering Research Foundation 1954-59

Open Houses and Cages for Laying Hens. Sta Bul 543. Co-author J E Parker

H R Sinnard

Graduate Specialization: Rural Housing

Memberships: ASAE, AIA, AAUP, Phi Kappa Phi

R N Lunde

Memberships: Society of Automotive Engineers, ASAE

Publication: A Portable Work Bench and Tool Cabinet. Cir of Info 553, Nov 1955

M G Cropsey

Graduate Specialization: Physics, Math Crop Processing

Memberships: Tau Beta Pi, SX, Sigma Pi Sigma, ASAE, AAUP

Publications: Drying and Curing Gladiolus Corms. Cir of Info 542, May 1954. Co-author Roy A Young

How to Build and Operate A Gladiolus Harvester. Cir of Info 544, Aug 1954

Ventilating Poultry Laying Houses. Sta Bul 552, Jan 1956

J W Wolfe

Graduate Specialization: Irrigation Science

Memberships: ASAE, SX, Alpha Zeta, Pi Mu Epsilon

J W Wolfe (Cont'd)

Publications: Buying A Sprinkler System Here's How! Sta Bul 548, May 1955
Improving Irrigation in Eastern Oregon. Sta Bul 558, May 1956
A New Approach for Maintaining A Constant Soil Moisture Content During Plant Growth. Tech paper 1154, May 1958
A Field Plot Sprinkler Irrigator. Misc paper 57, Sept 1958
Irrigation Efficiency, Consumptive Use, Soil Characteristics of the North Unit, Deschutes. Misc paper 72, May 1959
Effect of Controlled River Level on Yield of Irrigation Wells Near Jefferson, Oregon. Misc paper 84, November 1959
Ammonia Nitrogen Loss from Sprinkler Applications. Cir of Info 593, Jan 1959

D E Kirk

Graduate Specialization: Crop Processing, Materials Handling

Memberships: ASAE, SX, PME, Gamma Sigma Delta, AZ

Publications: Removal of Dents from Irrigation Pipe. AGRICULTURAL ENGINEERING, Dec 1954
A Self-Propelled Forage Plot Harvester. Co-author. AGRICULTURAL ENGINEERING, Jan 1957
Column Thicknesses for Shelled Corn Driers. AGRICULTURAL ENGINEERING TRANSACTIONS, 1959.

L W Bonnicksen

Graduate Specialization: Farm Structures

Memberships: ASAE, AZ, Phi Eta Sigma, PME, GSD, PKP

Publications: Rigid-Pillar Construction. AGRICULTURAL ENGINEERING, April 1955
Multi-Combination Pole-Type Construction. Sta Bul 557, July 1956, revised Oct 1957
Multicombination Farm Building Design. AGRICULTURAL ENGINEER, Aug 1956
Cantilever Rafters Lower Building Costs. AGRICULTURAL PROGRESS, May 1958

D R Long

Graduate Specialization: Crop Processing, Power and Machinery

Membership: ASAE

D E Booster

Graduate Specialization: Electrostatic Seed Separation

Memberships: Sigma Tau, Tau Beta Pi, SX, ASAE

Publications: Applications of Electrostatic Separation Principles to Cleaning Seeds of Certain Field Crops. Master's thesis, Corvallis, Oregon, OSC 1956

Electrostatic Seed Separation. Paper at Pacific NW Sec meeting of ASAE, Portland, Oregon, Oct 19-21, 1955

Electrostatic Seed Separation. Paper at 49th Annual Mtg of ASAE, Roanoke, Va, June 17-20, 1956

Electronic Seed Separator. OSC Tech Record 31:11-12, 38-39, May 1956

Caged Lightning Sorts Seeds. Western Feed and Seed. August 1956

Use of Electronics in Seed Separation. Seed Processors Short Course, OSC Feb 11-13, 1957

Some New Ideas in Seed Cleaning.Proceedings of Seed Processors Conf, U Calif, Davis, Calif, Feb 14-15, 1957

The Oregon Grass Seeder. Paper at Interagency Range Reseeding Equipment Comm mtg, Phoenix, Ariz, Jan 1958. Co-author D N Hyder

Electrostatic Seed Separation. Seed Processing, OSC and Small Seed Harvesting and Processing Sec, AERD, ARS, USDA, June 1958

Oregon Range Reseeding Experiments. Paper at Pacific NW Sec mtg, ASAE, Corvallis, Ore, Oct 22-24, 1958

Seed Cleaning Based on Electrical Properties. Paper at Seed Processors Short Course, OSC, Feb 5-7, 1959

Experimental Seeder for Soft Rangeland Seedbeds. Western Feed and Seed, April 1959

J E Schoof

Graduate Specialization: Soil and Water

Membership: ASAE

G E Page

Graduate Specialization: Heat Transfer and Thermodynamics

Memberships: AZ, ASAE

Publications: Sprayers for Experimental Plots. AGRICULTURAL ENGINEERING, 1954

Blade-Type Soil Fumigator for Control of Nematodes. Co-author H J Jensen. IMPLEMENT AND TRACTOR, May 1954

G E Page (Cont'd)

An Experimental Blade Type Fumigant Applicator. Co-author H J Jensen. PLANT DISEASE REPORTER, June 1954

Equipment for the Application of Chemicals to the Soil. PROCEEDINGS OF OREGON HORTICULTURAL SOCIETY, 1955

Ground Spray and Dusting Equipment. THE OREGON CHEMICAL APPLICATORS HANDBOOK, State Dept of Ag, Jan 1956

Corrosion and Abrasion. THE OREGON CHEMICAL APPLICATORS HANDBOOK, State Dept of Ag, Jan 1956

Soil Fumigation Equipment for Nematode Control. Co-author H J Jensen. Sta Bul 555

Green House and Plot Sprayers. Proceedings Western Regional and Calif Spray Conference, 1956

A Self-Propelled Forage Plot Harvester. Co-authors T L Jackson, Albert S Hunter. AGRONOMY JOURNAL

A Self-Propelled Forage Plot Harvester. Co-authors Dale E Kirk, T L Jackson. AGRICULTURAL ENGINEERING

Special Fumigation Equipment. Proceedings of Shell Nematology Workshop. Jan 1959

Ground Spray and Dusting Equipment. OREGON WEED CONTROL HANDBOOK, Ext Serv, OSC

J E Berney

Graduate Specialization: Soil & Water

Membership: ASAE

INSTRUCTIONAL STAFF

Department: Dairy and Animal Husbandry

Faculty Member	Nature of Appoint-ment	Ten-ure	Years of Service (OSC)	Years of Teaching or Profes-sional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institu-tions	Graduate Work Beyond Highest Degree Held
J C Miller	Prof 12 mo	I	1½	30	.33	.50	.17[1]	BS U Mo MS U Mo PhD U Mo	Travels in Europe, So Am
F F McKenzie	Prof 12 mo	I	15	37	.25	.75		BSA U BC AM U Mo PhD U Mo Doc Hon Agr Cath U Chile	Mich S1931 Cambridge U Royal Vet C, Sweden 1937
I R Jones	Prof 12 mo	I	34	39	.29	.56	.15	BS Penn St MS Rutgers PhD U Minn	
Hugo Krueger	Prof 12 mo	I	11	35	.30	.30	.40	AB U Denver MA U Denver PhD U Mich	
Ralph Bogart	Prof 12 mo	I	12	25	.50	.50		BS U Mo MS Kans StU PhD Cornell	
J R Haag	Prof 12 mo	I	33	42	.12		.88	BS Penn St MS Penn St PhD U Minn	
J E Oldfield	Prof 12 mo	I	8	12	.50	.50		BSA U BC MSA U BC PhD OSC	
C E Poulton	Prof 12 mo	I	10	22	.225	.275	.50	BS U Ida MS U Ida PhD WSC	

*D W Hedrick	Assoc Pr 12 mo	I	8	22	.17	.33	.50	BS WSC MS U Cal PhD Tex AM	
C W Fox	Assoc Pr 12 mo	I	4	9	.25	.65	.10[1]	BS Colo StU PhD U Cal	
J A B McArthur	Assoc Pr 12 mo	I	3	11		.25	.75	BS. U Alb MS Tex AM PhD Tex AM	
Floyd Wolberg	Assoc Pr 12 mo	I	14	20	.60	.15	.25[1]	BSA U Wisc MSA U Wisc	KanSt U
A W Oliver	Assoc Pr 10 mo	Y	40	40	.75	.25		BS OSC MS U Wis	U Cal
D C England	Asst Pr 12 mo	Y	4	10	.15	.75	.10[1]	BS WSC MS U Minn PhD U Minn	
W H Kennick	Asst Prof 12 mo	Y	½	10	.25	.75		BS Clemson MS OSC PhD OSC	
S H Wu	Asst Pr 12 mo	I	7	18	.10	.90		BS Nat Cent U China MS, PhD OSC	
F G Hueter	Asst Pr 12 mo	Y	1½	6	.10	.90		BS, MS, PhD U Md	
D C Church	Asst Pr 12 mo	Y	3	6	.10	.90		BS Kan StU MS U Ida PhD Okl StU	3 crs audited
Paul C Berger	Instr 12 mo	Y	4½	8			1.00	BS OSC MS OSC	
R W Mason	Jr An Phys 12 mo	Y	1½	6			1.00	BS,MS U Wyo PhD OSC	
John Adair	Instr 12 mo	Y	5	9		1.00		BS OSC	9 hrs MS OSC
C E Conrad	Jr Assoc Rng Mgmt 12 mo	Y	0	0		1.00		BS OSC MS OSC	
F M Stout	JrAnNutr 12 mo	Y	0	4		.85		BS Colo StU MS OSC	60 hrs OSC

Department: Dairy and Animal Husbandry (Cont'd)

Faculty Member	Nature of Appointment	Tenure	Years of Service (OSC)	Years of Teaching or Professional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institutions	Graduate Work Beyond Highest Degree Held
Wm C VanArsdel	Jr An Phys 12 mo	Y	5	5		.40	.40	BS, MS,PhD OSC MS UO Med	
P M Rutland	Instr 12 mo	Y	15		.25		.75		
R S Driscoll	Instr	Y	1	7	.25		.25	BS Colo StU MS Colo StU	Working PhD OSC

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1 Ag Tech Adv
* On leave

INSTRUCTIONAL STAFF

Department: Dairy and Animal Husbandry

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

J C Miller

Graduate Specialization: Meats Investigations, Animal Breeding and Physiology

Memberships: Alpha Zeta, Phi Kappa Phi, Sigma Xi, Am Soc An Prod, Am Assn Adv Sci, Am Dairy Sci Assn

Publications: Have been in administrative work—only publications in past 5 yrs have been speeches or articles published in Ext, trade or ind journals or bulletins.

F F McKenzie

Graduate Specialization: Reproductive Physiology, Artificial Insemination

Memberships: SX, Gamma Sigma Delta, ASAP, Soc Italiana Per'd, Progresso delle Zovtechnica, AAAS (Fellow)

Publications: Microstructure of Spermatozoa after denudation as revealed by the electron microscope. Co-author S H Wu. J An Sci 1955

Metabolic pathways of glucose utilization in spermatozoa. Co-author S H Wu. Proc Am Soc An Prod 1955

It is performance that counts. President's address, Proc Amer Coc An Prod West Sec 1956

Review of S A Asdell's book, "Cattle Fertility and Sterility". J Range Mgt, Sept 1956

Pathways of glucose utilization in epididymal and testicular sperm cells. Co-authors S H Wu, S C Fang, J S Butts. J Dairy Sci, 1959

The effects of red clover feeding on reproduction in sheep. Co-authors C W Fox, J E Oldfield. Proc Am Soc An Prod West Sec 1959. Tech paper 1233

I R Jones

Graduate Specialization: Dairy husbandry

Memberships: SX, AZ, GSD, Gamma Alpha, ADSA, ASAP

Publications: Carotene in the ration of dairy cattle. I. The influence of long periods of suboptimal carotene intake on the carotene and Vitamin A values of the blood, liver and milk fat of dairy cows. Co-authors J H Byers, P H Weswig, J F Bone. J Dairy Sci, 1955.

I R Jones (Cont'd)

Value of identical twin cattle in digestibility studies. Co-author Clarence Chestnutt, Jr. (abstract) J Dairy Sci, June 1955

The relation of carotene intake to the carotene and Vitamin A values of the plasma, liver and milk fat of dairy cattle. Co-authors P H Weswig, J F Bone and B F Magill. (abstract) J Dairy Sci, June 1955

Nutrient losses of silage preserved in farm-size silos using dried molasses beet pulp and sodium metabisulfite as additives. Co-authors J V Bateman, J R Schubert. Proc 36th An Mtg West Div ADSA, Tech paper 915, 1955

Comparative palatability and nutritive value of alfalfa silage preserved with dried molasses beet pulp and sodium metabisulfite. Co-authors J V Bateman, J R Schubert. Proc 36th An Mtg, West Div ADSA. Tech paper 914, 1955

Studies on the calcium phosphorus requirements of dairy cattle. Co-authors R G Sprowls, J R Haag, P M Brandt. Proc 37th An Mtg, West Div ADSA, 1956

A comparison of the conventional and phsophytin methods of determining dry matter digestibility with dairy cattle. Co-authors J V Bateman, J R Schubert. Proc 37th An Mtg West Div, ADSA, 1956

Forage investigations with dairy cattle. Proc 15th An Ore An Ind Conf, 1957

The use of corn steep liquor as a preservative for grass silage. Co-authors J R Schubert, J V Bateman, P H Weswig. Proc 38th An Mtg West Div, ADSA, 1957

Carotene and Vitamin A content of bovine liver before and after parturition. Co-authors P H Weswig, R G Sprowls, J F Bone. Proc 38th An Mtg West Div ADSA, 1957

Baled, wafered and pelleted hay, comparative feeding values for milk production. Co-authors B F Magill, R G Petersen. Misc pub. May 1958

Comparative feeding value of oat and pea silage preserved with dried molasses beet pulp vs ryegrass screenings. Co-authors D D Bullis, R H Kliewer. Tech paper 1249

Dried molasses beet pulp vs chopped alfalfa hay as a preservative for oat and vetch silage. Co-authors D D Bullis, R H Kliewer. Tech paper 1251.

Hugo Krueger

Graduate Specialization: Chemistry, Physiology

Memberships: Am Soc Pharm & Exp Therap, Am Phys Soc, Am Stat Soc, Soc Exp Biol & Med, Ore Acad Sci, West Sec Am Soc An Prod, Swiss Phys Soc, SX, Phi Tamba Upsilon, Phi Sigma, Pi Mu Epsilon, Eta Sigma Phi

Publications: The Wulzen Calcium Dystrophy Syndrome in guinea pigs. Am J Physical Med, 1955

Hugo Krueger (Cont'd)

Pituitary and body size in rabbits. Co-authors John Kaufmes, Ralph Bogart. Fed Proc 14, 1955

Thyroid, pituitary and body size in rabbits. Co-authors John Kaufmes, D A Price, R W Mason, Ralph Bogart. Proc West Sec Amer Cos An Prod 6, 1955

Demonstration: Hydrocephalus, enlarge thyroids and cervical curvature of the spine associated with early death of calves. Co-authors John Kaufmes, Ralph Bogart, P A Allen, L R Vawter. Proc West Sec Am Soc An Prod 6, 1955

Narcotics and Analgesics. The Alkaloids, 1955

Rate and efficiency of gains in beef cattle. IV. Blood hemoglobin, glucose, urea, amino acid nitrogen, creatinine, and uric acid of growing Hereford and Angus calves. Co-authors M A MacDonald, Ralph Bogart. Tech Bul 36, 1956

Sine wave expressions of respiratory phenomena. Fed Proc 15, 1956

Blood chemical differences between Hereford and Angus cattle. Co-authors M A MacDonald, Ralph Bogart. Fed Proc 15, 1956

Heart sounds of domestic animals. Co-authors Van Arsdell III, John Weinmann. Proc West Sec Am Soc An Prod, July 1956

Diet induced cardiac arrhythmia in a beef calf. Co-authors Wm Van Arsdel, J E Oldfield. Proc West Sec Am Soc An Prod. July, 1956

Genetic effects on adrenal, pituitary, thyroid and body weights of rabbits. Co-authors John Kaufmes, Ralph Bogart. Proc West Sec Am Soc An Prod. July, 1956

Growth rate, feed efficiency and thyroid activity in male mice of different strains and strain crosses. Co-authors R W Mason, Ralph Bogart. Proc West Sec Am Soc An Prod. July, 1956

Correlations of nitrogenous and carbohydrate constituents of the blood and urine with rate and efficiency of gains in beef calves. Co-authors D A Price, M A MacDonald, Ralph Bogart, C E Shelby, R T Clark. Proc West Sec Am Soc An Prod. July, 1956

A Symposium: Water balance in ruminants. Remarks and summary. Proc West Sec Amer Soc of An Prod 7, 1956

Strain differences of thyroids in mice. Co-authors Robert Mason, Ralph Bogart. Am J Phys 187, 1956

Inherited differences in vitamin requirements among mice. Co-authors R W Mason, Hugh Nicholson, Ralph Bogart. The J Pharm and Exper Therap 119, 1957

Testosterone administration to young bovine females prior to pregnancy. Co-authors R W Mason, Hugh Nicholson, Ralph Bogart. J Pharmacol and Exper Therap 119, 1957

The effects of injected testosterone into lactating rats on the suckling gains of their offspring. Co-authors Hugh Nicholson, R W Mason, John Kaufmes, Ralph Bogart. J Pharmacol and Exper Therap, 1958

Hugo Krueger (Cont'd)

Urogenital anomalies in calf born to beef cow treated with testosterone during pregnancy. Co-authors R W Mason, J F Bone, Ralph Bogart. J Pharmacol and Exper Therap, 1958

Genetic aspects of fertility in mice. Co-authors Ralph Bogart, R W Mason, H H Nicholson. Int J Fert 3, 1958

Effect of injected testosterone on fertility in female cattle and sheep. Co-authors Ralph Bogart, Frank Hudson, Hugh Nicholson, R W Mason. Int J Fert 3, 1958

Effect of phosphate deficiency on feed intake and body weights of rats. Co-authors J E Oldfield, Ralph Bogart, John Kaufmes, Megh Bikram Shah. Proc West Sec Am Soc An Prod 8, 1957

Respiratory dead space in cattle. Proc West Sec Am Soc An Prod 8, 1958

Method of adjusting data for differences due to sex. Co-authors R W Mason, Ralph Bogart. Proc Am Soc An Prod 9, 1958

Heritability estimates as affected by sex, genetic environmental interaction, and type of selection practiced. Co-authors R W Mason, Ralph Bogart. Proc West Sec Am Soc An Prod 9, 1958

Rate and efficiency of gains in beef cattle. V. Serum phosphatases of growing Hereford and Angus calves. Co-authors G I Alexander, Ralph Bogart. Tech Bul 42, 1958

The effect of intravenous glucose injections on appetite in adult ewes. Co-authors Robert Manning, G I Alexander, Ralph Bogart. Am J Vet Res 20, 1959

Rate and efficiency of gains in beef cattle. VI. Breed, line, and sex differences for some blood constituents of young beef cattle. Co-authors D A Price, G I Alexander, Ralph Bogart. Tech Bul 46, 1959

Rate and efficiency of gains in beef cattle. VII. Hematology of growing Hereford and Angus calves. Co-authors G I Alexander, D A Price, Ralph Bogart. Tech Bul 47, 1959

Thiouracil and oxygen consumption of mice. Co-authors Sucheep Ratarasarn, Robert Mason, Ralph Bogart. Fed Proc 18, 1959

Predominance of hybrid losses or negative heterosis in mouse crosses. IV. Int. Co-authors R Mason, H Nicholson, R Bogart. Symposium of Biometrical Genetics, Ottawa, Can. 1958. Abstract, Biometrics 15, 1959

Carbohydrate metabolism in ruminants. Co-authors Robert Manning, Graham Alexander. Handbook of 2nd W-1 Workshop, Tucson, Ariz. USDA, ARS, Denver 2, Colo.

The effect of antibiotics on semen production in rabbits. Co-authors Tim Bhannasiri, Ralph Bogart. Am J Vet Res 20, July, 1959

Testosterone inhibition of ovulation in heifers. Co-author Ralph Bogart. The Pharmacologist 1, 1959

Lead selection for electrocardiograms of beef cattle. Co-author W C VanArsdel III. The Physiologist 2, 1959

Ralph Bogart

Graduate Specialization: Genetics, Zoology, Reproductive Physiology, Nutrition, Histology, Embryology

Memberships: SX, PKP, AZ, GSD, AAAS, ASAP, Soc of Zool, Am Assn of Anatomists, Int Fert Assn, Genetic Soc of Am, Am Genetic Assn, New York Acad of Sci, Ore Acad of Sci, AAUP

Publications: Pasture management for sheep production on hill lands in western Oregon. Co-author D W Hedrick. Sta Bul 554, 1955

Rate and efficiency of gains in beef cattle: III. Factors affecting weight and effectiveness of selection for gains in weight. Co-authors Glen H Hitchcock, W A Sawyer, Lyle Calvin. Sta Tech Bul 34, 1955

Brahman x Hereford with Herefords, a comparison. Co-authors: Farris Hubbert, Jr, E N Hoffman, W A Sawyer, A W Oliver. Sta Bul 549, June 1955

Pituitary and body size in rabbits. Co-authors Hugo Krueger, John Kaufmes. Fed Proc 14, March 1955

Relationship between rate and efficiency of gain and type in beef cattle. Co-author M A MacDonald. New Zealand J Sci and Tech 36

The relationships of some digestion coefficients to rate and efficiency of gains in growing beef cattle. A preliminary report. Co-authors G E Nelms, D A Price. Proc West Sec Am Soc An Prod 6, Tech paper 923, 1955

Thyroid, pituitary and body size in rabbits. Co-authors Hugo Krueger, John Kaufmes, D A Price, R W Mason. Proc West Sec Am Soc An Prod 6, Tech paper 922, 1955

Demonstration: Hydrocephalus, enlarge thyroids and cervical curvature of the spine associated with early death of calves. Co-authors Hugo Krueger, John Kaufmes, P A Allen, L R Vawter. Proc West Sec Am Soc An Prod 6, Tech paper 920, 1955

Some factors affecting feed utilization in growing beef cattle. Co-author George Nelms. Jour An Sci 14, Nov, 1955

Using hormones in livestock production. Stockmen's Handbook. Stockmen's Short Course, WSC, Dec 1955

Comparison of some sheep breeds for fat lamb production in the West Coast area. Stockmen's Handbook. Stockmen's Short Course WSC, Dec 1955

How much consideration should cattlemen give to type. Stockmen's Handbook. Stockmen's Short Course, WSC, Dec 1955

Improving cattle through selective breeding for rate and efficiency of production. Stockmen's Handbook. Stockmen's Short Course, WSC, Dec 1955

How to obtain a higher percent calf crop. Stockmen's Handbook. Stockmen's Short Course, WSC, Dec 1955

Artificial insemination of beef cattle. Stockmen's Handbook, Stockmen's Short Course, WSC, Dec 1955

Ralph Bogart (Cont'd)

Breeding, selecting, and improving swine. Stockmen's Handbook. Stockmen's Short Course. WSC, Dec 1955

Rate and efficiency of gains in beef cattle. IV. Blood hemoglobin, glucose, urea, amino acid nitrogen, creatinine, and uric acid of growing Hereford and Angus calves. Co-authors M A MacDonald, Hugo Krueger. Tech Bul 36, 1956

The effects of injected testosterone on adult ewes. Co-authors E F Johnston, Frank Hudson, A W Oliver, Fred F McKenzie. Jour An Sci 15, Feb 1956

Retention of injected testosterone in the meat of adult ewes. Co-authors E F Johnston, Frank Hudson, John Kaufmes. Jour An Sci, Feb 1956

Blood chemical differences between Hereford and Angus cattle. Co-authors Hugo Krueger, M A MacDonald. Fed Proc 15, 1956

Body weight during and after pregnancy of NZ female rabbits bred to P, NZ, and FG males. Co-authors John Kaufmes, Hugo Krueger. Abstract. Proc Ore Acad of Sci, 1956

Duration of pregnancy in New Zealand females bred to P, NZ and FG male rabbits. Co-authors Hugo Krueger, John Kaufmes. Abs Proc Ore Acad of Sci, 1956

Relationship of suffocation time to rate of gain, food intake, and thyroid weight in male mice from strain crosses. Co-authors R W Mason, Hugo Krueger. Abs. Proc Ore Acad Sci, 1956

The effects of injected testosterone into lactating mice on the suckling gains of their offspring. Co-authors Hugh H Nicholson, R W Mason, John Kaufmes, Hugo Krueger. Abs. Proc Ore Acad Sci, 1956

Correlations involving body measurements, scores and certain production traits in beef cattle. Co-authors G E Nelms, D A Price, C E Shelby, R T Clark. Proc West Sec Am Soc An Prod 7, 1956

Growth rate, feed efficiency and thyroid activity in male mice of different strains and strain crosses. Co-authors R W Mason, Hugo Krueger. Proc West Sec Am Soc of An Prod, 1956

Genetic effects of adrenal, pituitary thyroid and body weights of rabbits. Co-authors John Kaufmes, Hugo Krueger. Proc West Sec Am Soc An Prod 7, 1956

A urine collecting apparatus for bulls and heifers. Co-authors R W Mason, George Nelms. Proc West Sec Am Soc An Prod, 1956

Correlations of nitrogenous and carbohydrate constituents of the blood and urine with rate and efficiency of gains in beef calves. Co-authors D A Price, M A MacDonald, Hugo Krueger, C E Shelby, R T Clark. Proc West Sec Am Soc An Prod 7, 1956

The effect of birth weight, age of dam and time of birth on suckling gains of beef calves. Co-author G E Nelms. J of An Sci August, 1956

Factors affecting weaning weights of crossbred spring lambs. Co-authors R C deBaca, Lyle D Calvin, O M Nelson. J of An Sci 1956

The effect of injected testosterone into lactating rats on the suckling gains of their offspring. Co-authors Hugo Krueger, H Nicholson, R W Mason, John Kaufmes. J Phar & Exp Therapeutics, 1958

Ralph Bogart (Cont'd)

Urogenital anomalies in calf born to beef cow treated with testosterone during pregnancy. Co-authors R W Mason, J F Bone, Hugo Krueger. J Pharm & Exp Therapeutics, 1958

Passage of testosterone across mammalian placentae. Co-authors Stewart Floyd, Frank Hudson, Hugh Nicholson, R W Mason, Hugo Krueger. Ore Acad of Sci, 1957

Species differences in effects of testosterone. Co-authors Frank Hudson, Hugh Nicholson, R W Mason, Hugo Krueger. Ore Acad of Sci, 1957

Hematology and blood chemistry in testosterone-treated sheep. Co-authors D A Price, G I Alexander, Hugo Krueger. Ore Acad of Sci, 1957

Factors affecting birth weights of crossbred lambs. Co-authors R C deBaca, Lyle E Calvin, O M Nelson. J An Sci. Tech paper 977, 1957

Effect of injected testosterone on fertility in female cattle and sheep. Co-authors R W Mason, Frank Hudson, Hugh Nicholson, Hugo Krueger. Int J of Fert, Tech paper 1020, 1957

Genetic aspects of fertility in mice. Co-authors R W Mason, Hugh Nicholson, Hugo Krueger. Int J of Fert, 1958. Tech paper 1022

Heritability estimates as affected by sex, genetic environmental interaction, and type of selection practiced. Co-authors R W Mason, Hugo Krueger. Proc West Sec Am Soc An Prod. Tech paper 1138, 1958

Effect of phosphate deficiency on feed intake and body weights of rats. Co-authors Hugo Krueger, J E Oldfield, John Kaufmes, Megh Bikram Shah. Proc West Sec Am Soc of An Prod. Tech paper 1153, 1957

Method of adjusting data for differences due to sex. Co-authors Hugo Krueger, R W Mason. Proc Am Soc An Prod. Tech paper 1144, 1958

Rate and efficiency of gains in beef cattle. V. Serum phosphatases of growing Hereford and Angus calves. Co-authors Hugo Krueger, G I Alexander. Tech Bul 42, Oct 1958

Inherited lethals and economic abnormalities in farm animals. WSC Stockmen's Handbook. 1958

The inheritance of growth rate and mature body size. How maternal effects and environment influence growth patterns. WSC Stockmen's Handbook. 1958

The elements of horse genetics. WSC Stockmen's Handbook. 1958

Rate and efficiency of gains in beef cattle. VI. Breed, line and sex differences for some blood constituents of young beef cattle. Co-authors G I Alexander, D A Price, Hugo Krueger. Tech Bul 46, 1959

Thiouracil and oxygen consumption of mice. Co-authors Hugo Krueger, Sucheep Ratarasarn, R W Mason. Fed Proc, March 1959

Ralph Bogart (Cont'd)

Research Highlights. The Performance Register. Feb, 1959

The effect of intravenous glucose injections on appetite in adult ewes. Co-authors Robert Manning, G I Alexander, Hugo Krueger. Am J Vet Res, 1959

Preponderance of hybrid losses or negative heterosis in mouse crosses. Co-authors R W Mason, H Nicholson, H Krueger. IV Int Symp Biometrical Gen, 1958

Seasonal changes in coat characters in relation to performance in cattle. Co-author G I Alexander. Proc West Sec Am Soc An Prod, 1959

The effects of inbreeding on performance characteristics in inbred lines of beef cattle. Co-author G I Alexander. Proc West Sec Am Soc An Prod, 1959

Rate and efficiency of gains in beef cattle. VII. Hematology of growing Hereford and Angus calves. Co-authors G I Alexander, D A Price, Hugo Krueger. Tech Bul 47, 1959

Testosterone inhibition of ovulation in heifers. Co-author Hugo Krueger. The Pharmacologist, 1959

Hormonal relationships and applications in the production of meats, milk and eggs. Co-authors L E Casida, F N Andrews, M T Clegg, A V Nalbandov. Nat Acad Sci - Nat Res Council, 1959

Improvement of Livestock. 1959

J R Haag

Graduate Specialization: Agricultural and Biological Chemistry

Memberships: Am Chem Soc, Am Inst Nutr, Am Soc Biol Chem, ADSA

Publication: The Livestock Industry in Israel's Nutritional Economy. J Nutr, 1957. Fed Proc, 1958. USOM Age Rept, Oct 1956

J E Oldfield

Graduate Specialization: Animal Husbandry, Animal Nutrition, Biochemistry, Physiology

Memberships: SX, PKP, AAUP, ACS, ASAP, Nat Res Coun (fur an nutr), NY Acad Sci, Ag Inst Canada, Pac Fish Tech

Publications: Responses to aureomycin supplementation by lambs under different feeding conditions. Co-author A F Anglemier. Proc Am Soc An Prod West Sec, 1955

White muscle disease (myopathy) in lambs and calves. II. Blood studies in cattle and sheep fed a ration of cull beans and alfalfa hay. Co-author W W Ellis. Proc Am Soc An Prod West Sec, 1955

Atrophic rhinitis in swine. I. Methods of control in a purebred herd. Co-authors T K Johnson, J F Bone. N Am Vet 36, 1955

J E Oldfield (Cont'd)

Phenothiazine treatment of fattening lambs in drylot. Co-author P H Allen. Am J Vet Res 17, 1956

Identification of cystine calculi in mink. Co-authors P H Allen, J Adair. Proc Soc Exp Biol and Med 91, 1956

Effects of antibiotic and anthelmintic administrations to feeder lambs. Co-authors G E Nelms, P H Allen. Proc Am Soc An Prod West Sec 7, 1956

Feeding of various levels of California sardine oil to swine. Co-author A F Anglemier. J An Sci 16, 1957

Feeding of crude and modified menhaden oils in rations for swine. Co-author A F Anglemier. J An Sci 16, 1957

Feeding fish oils to domestic animals. Co-authors A F Anglemier, M E Stansby. Commercial Fisheries Review 19, 1957

The effects of phosphate fertilization of alfalfa on growth, reproduction and body composition of domestic rabbits. Co-authors W W Heinemann, M E Ensminger, W E Ham. J An Sci 16, 1957

White muscle disease in lambs and calves. V. Experimental production in lambs from ewes fed Ladino clover chaff. Co-authors O H Muth, J R Schubert. Proc Am Soc An Prod West Sec 8, 1957

Effect of feeding red clover (Trifolium pratense) on reproduction in laboratory mice. Co-authors C W Fox, J Kaufmes, R W Mason. Proc Am Soc An Prod West Sec 8, 1957

White muscle disease (myopathy) in lambs and calves. III. Experimental production in calves from cows fed alfalfa hay. Co-authors W W Ellis, O H Muth. J A V M A 132, 1958

The Handbook of Feedstuffs - Book review. In J Range Mgmt, 1957

Implications of legume forages in white muscle disease. Proc An Conf Exp Sta Collaborators, WRRL, Albany, Calif, Mar 1958

Improving mink nutrition. Co-authors J Adair, F M Stout. Misc paper 58, 1958

Effects of selenium and vitamin E on white muscle disease. Co-authors O H Muth, L F Remmert, J R Schubert. Science 128, 1958

Supplementing potato diets for fattening cattle. Co-author E N Hoffman. Cir of Info 595, 1958

Effects of incorporation of red clover or estradiol in the diet on reproductive organs of mice. Co-authors C W Fox, R W Mason, J Kaufmes. Proc Am Soc An Prod West Sec 9, 1958

Agronomic and biochemical evaluation of genotypes of tall fescue. II. Digestibility energy and N balance among 3 selections with sheep. Co-authors J R Schubert, D C Church, J R Cowan. Proc Am Soc An Prod West Sec 9, 1958

Ration formulation. WSC Stockmen's Handbook, 1958

Early weaning of pigs. WSC Stockmen's Handbook, 1958

Nutritional Diseases of Livestock. WSC Stockmen's Handbook, 1958

White muscle disease (Myopathy) in lambs and calves. VI. Effects of selenium and vitamin E on lambs. Co-authors O H Muth, J R Schubert, L F Remmert. Am J Vet Res 20, 1959

J E Oldfield, (Cont'd)

White muscle disease in beef cattle. Beef Cattle and Swine Field Day Report. OAES. 1959

Feeding pre-weaning pigs. Beef Cattle and Swine Field Day Report. OAES. 1959

There are hormones in forage. Co-author C W Fox. The Rural New Yorker. 1959

Modern concepts in swine feeding. Feed Age. 1959

Improvement of barley rations for swine. I. Effects of water treatment and enzyme supplementation. Co-author L M Larsen. Proc Am Soc An Prod West Sec 10, 1959

The effects of red clover on reproduction in sheep. Co-authors C W Fox, F F McKenzie. Proc Am Soc An Prod West Sec 10, 1959

Effects on fertility of feeding red clover to mice. Co-authors R L Manning, C W Fox, R W Mason. Fed Proc 18, 1959

New developments in mink nutrition. Co-authors J Adair, F M Stout. OAES Misc publ 80, Sept 1959

C E Poulton

Graduate Specialization: Range Management, Animal Nutrition, Ecology and Soils

Memberships: Phi Eta Sigma, Xi Sigma Pi, Am Soc RM, Soc Am For, SX, PS, Ecol Soc Am, Soil Sci Soc of Am and West Sec, Sec., vice chm and chm range div, Soc of Am For, Assoc Ed for Range Management Jrl of Forestry

Publications: The Research and Marketing Act supports range research. J Range Mgt 8, March 1955

Ecology of the non-forested vegetation in Umatilla and Morrow Counties, Oregon. PhD dissertation, WSC, 1955

Range management education--the problem. J Range Mgt 9, 1957

Collection of ecological data for soil-site correlation in Oregon. Co-author E Anderson. Range Mgmt OSC and US SCS, 1958

Division of range management--its service to forestry. J Forestry. July 1957

Ranchers, ranges and cows. Co-authors Elgin Cornett, Art Sawyer, Joe Johnson, E R Jackman. Ext Serv Bul 772, March 1958

Range resources. Co-author D W Hedrick. Atlas of Pacific NW, Second Ed. 1957

Soil-vegetation research and surveys in multiple use management of western ranges. Grasslands. AAAS Pub 53, 1959

Book review - The Study of Plant Communities. An Introduction to Ecology by Henry J Oosting. J Range Mgt, 1956

Out on the range (careers brochure). Co-author D W Hedrick. ASRM and OSC

D W Hedrick

Graduate Specialization: Range Management, Forestry, Animal Husbandry, Statistics

Memberships: ASRM, XSP, SX, Coun-NW Sec Am Soc RM, Chm-1960 ASRM Prog Comm

Publications: Alfilaria (Erodium circutarium). Ext Range Plant Leaflet 8, .1957

Book review. Jrl of Range Mgmt. November, 1956

Book review. Jrl of Range Mgmt. March, 1956

Clipping treatments on tall fescue. Misc paper 53. Dec, 1957

Fertilizer treatments on tall fescue. Misc paper 52. Dec, 1957

Grass is the wealth. Co-authors E R Jackman, W W Chilcote, Gene Lear. Bul 770. Dec, 1957

Grazing and Douglas Fir establishment in the Oregon White Oak type. Co-authors F C Hall, R J Keniston. Jrl of Forestry. Feb, 1959

Grazing tall oatgrass. Crops and Soils. Dec, 1956

Green fescue (Festuca irridula). Ext Range Plant Leaflet 9, 1957

Idaho fescue (Festuca idahoensis). Ext Range Plant Leaflet 19, 1957

Managing sheep on hill pastures. Co-author Ralph Bogart. Sta Bul 554. November, 1955

The performance of several improved forage species on Laughlin-like soils in Western Oregon. Co-authors V Valassis, D D Hill. Jrl of Range Mgmt. Tech paper 952. March 1957

Proper utilization--a problem in evaluating the physiological response of plants to grazing use: A review. Jrl of Range Mgmt. Mis paper 46. Jan, 1958

Range resources. Co-author C E Poulton. Atlas of Pacific Northwest. 2nd Ed. 1957

Range Robbers--undesirable range plants. Co-authors W A Sawyer, Elgin Cornett, David F Costello, E R Jackman, W R Furtick, Barry N Freeman. Ext Serv Bul 780. Dec, 1958

The desert grassland by Robert R. Humphrey -- Review. Botanical Review. Jrl of Range Mgmt. Jan, 1959

Sheep fescue (Festuca Ovina). Ext Range Plant Leaflet 7, 1957

Subclover pastures. Co-author R L Jackson. Ext Ser. Fertilizer Recommendations 15. Jan, 1958

What about our range management technical assistance programs? Jrl of Range Mgmt. Jan, 1955

Out on the range. (Careers brochure)

C W Fox

Graduate Specialization: Genetics

Memberships: ASAP, West Sec ASAP, AAAS, SX

Publications: Effects of feeding red clover (Trifolium pratense) on reproduction in laboratory mice. Co-authors J Kaufmes, R W Mason, J E Oldfield. Proc West Sec Am Soc An Prod. Tech paper 1059, 1957

Effects of incorporation of red clover or estradiol in the diet on reproductive organs of mice. Co-authors R W Mason, JE Oldfield, J Kaufmes. Proc West Sec Am Soc An Prod. 1958

Effects of red clover or hay on reproduction in sheep. Co-author J E Oldfield. Proc West Sec Am Soc An Prod, 1958

The effects of red clover feeding on reproduction in sheep. Co-authors F F McKenzie, J E Oldfield. Proc West Sec Am Soc An Prod. 1959

Lamb response to three experimental feeding methods. Co-author D C Church. Proc West Sec Am Soc An Prod, 1959

Effect of pellet size and roughage grind on performance of fattening lambs. Co-authors D C Church, J A B McArthur. Proc West Sec Am Soc An Prod, 1959

Effects on fertility of feeding red clover to mice. Co-authors R L Manning, R W Mason, J E Oldfield. Fed Proc. March 1959

Effect of non-nutritive additives in a lamb fattening ration. Co-author D C Church. Feedstuffs. August 1958

A review of pellet feeding for lambs. Proc 17th An Ore An Ind Conf. Jan, 1959

There are hormones in forage. Co-author J E Oldfield. The Rural New Yorker. July, 1959

J A B McArthur

Graduate Specialization: Forage Production, Range Management, Animal Production, Genetics (Animal)

Memberships: Am Soc of Range Mgt, West Sec ASAP

Publication: Effect of pellet size and roughage grind on performance of fattening lambs. Co-authors D C Church, C W Fox. OAES Tech 1240

Floyd Wolberg

Graduate Specialization: Animal Husbandry, Genetics

Membership: ADSA

Publication: Int to Animal Science. 1959

A W Oliver

Graduate Specialization: Animal Nutrition

Memberships: ASAP, West Sec ASAP

D C England

Graduate Specialization: Animal Breeding

Memberships: AZ, PKP, SX, ASAP, West Sec ASAP

Publications: A study of the rate of improvement that can be achieved through application of genetic principles in a herd of swine maintained under rigidly controlled environmental conditions. Annual Report, Hormel Institute. 1953-54, 1954-55

A study of the interrelationships of growth rate, feed efficiency, carcass quality and dressing percentage in swine. Annual Report, Hormel Institute. 1953-54, 1954-55

Stilbestrol works with several feeds. Ore Ag Progress, 1957

1956-57 Milton-Freewater beef feeding experiments. 1957 Field Day report. Co-author N O Taylor

Stilbestrol: Does it affect meat eating quality? Co-authors L Sather, A F Anglemier. Ore Ag Progress, 1958

Concentrate supplements for low cost roughages for beef cattle. Proc 16th An Ore An Ind Conf. 1958

Comparison of pelleted vs. non-pelleted feed as wintering ration for weaner bull calves. Co-author J C Hesketh. Baker Cty Ext Ser. 1958

Comparison of different wintering rations for commercial weaner calves. Co-author J C Hesketh. Baker Cty Ext Ser. 1958

Preliminary observations on growth response of spayed and unspayed heifers to an estrogen-testosterone implant. Squibb Inst Med Res. 1958

Growth response of weaner steers in feedlot to repeated stilbestrol implantation. Co-author N O Taylor. Proc West Sec Am Soc An Prod, 1958

Alfalfa hay pellets, cull peas and soybean oil meal as protein supplements for weaner calves on wintering and fattening rations. Co-author N O Taylor. Proc West Sec Am Soc An Prod, 1958

Field Day Report, 1957-59 Milton-Freewater beef feeding experiments. Co-author N O Taylor. 1958

Results of 1957-58 Milton-Freewater beef feeding experiments. Co-author N O Taylor. OAES Cir of Info 596. 1959

Results of beef feeding experiments. OSC Beef Cattle and Swine Field Days. 1959

Swine Breeding Research and Evaluation in Oregon. OSC Beef Cattle and Swine Field Days. 1959

Steers gain on stilbestrol reimplants. Ore Ag Progress. Spring, 1959

D C England (Cont'd)

The effect of stilbestrol and testosterone implantation on the chemical composition of the 9-10-11th rib and Longissimus dorsi muscle of steer carcasses. Co-authors W H Kennick, A F Anglemeir. Proc West Sec Am Soc An Prod. 1959

Effect of low dosage stilbestrol implants on growth rate of suckling wether lambs. Proc West Sec Am Soc An Prod. 1959

Effect of implanted testosterone on growth rate of weaner steers with and without previous stilbestrol implantation. Co-author N O Taylor. Proc West Sec Am Soc An Prod. 1959

Milton-Freewater Beef Feeding Experiments. Co-author N O Taylor. OAES Misc pub 75. 1959

Relationships of inherent growth capacity of beef cattle to response to exogenous stimuli. I. Response to implanted stilbestrol. J An Sci. 1959

W H Kennick

Graduate Specialization: Animal Husbandry, Food Technology, Statistics

Memberships: AZ, PKP, ASAP, West Sec ASAP

Publications: Effect of varying dietary protein and energy levels on carcass quality in swine. MS thesis, OSC. 1958

Estimation of the percentage of fat and lean in the edible portion of steer carcasses. PhD thesis, OSC. 1958

Techniques for red meat determination. Summary of reports, Beef Cattle and Swine Field Days. OSC, May 1959

The effect of stilbestrol and testosterone implantation on the chemical composition of the 9-10-11th rib and Longissimum Dorsi muscle of the steer carcasses. Co-authors D C England, A L Anglemier. Proc West Sec Am Soc An Prod. 1959

S H Wu

Graduate Specialization: Animal Breeding

Memberships: SX, Ore Acad of Sci, ASAP, ADSA, AAAS

Publications: Microstructure of spermatozoa after denudation as revealed by the electron microscope. Co-author F F McKenzie. J An Sci, 1955

Metabolic pathways of glucose utilization in spermatozoa. Co-author F F McKenzie. Proc Am Soc An Prod, 1955

Pathways of glucose utilization in eqididymal and testicular sperm cells. Co-authors F F McKenzie, S C Fang, J S Butts. J Dairy Sci, 1959

F G Hueter

Graduate Specialization: Animal Nutrition

Memberships: ADSA, ASAP, Am Chem Soc, SX, AZ

Publications: In Vitro studies on the dissimilation of purines and pyrimidines by bovine rumen bacteria. Co-author P Jurtshuk, Jr. AES Misc pub. 1955

In Vivo and In Vitro rumen dissimilations and the metabolism of lactate in vivo. MS thesis, Univ of Maryland. 1956

Absorption and dissimilation of lactate added to the bovine rumen and the resulting effects on blood glucose. Co-authors J C Shaw, R N Doetsch. J Dairy Sci. 1956

Nutritional requirements of rumen bacteria. Co-author J J Gilroy. Misc pub. Md AES. 1957

Rumen perfusion: A new technique for the ruminologist. Co-authors R D McCarthy, J B Holter, J C Shaw, Jeanne McCarthy. Misc pub. Md AES. 1957

Comparison of In Vivo and In Vitro techniques in ruminology studies. Co-authors R J Gibbons, J C Shaw, R N Doetsch. J Dairy Sci. 1958

The Oxidative Metabolic Pattern of Normal and Ketolic Cow Liver as Studied with I-C^{14}-Labeled C_1 Through C_5 Aliphatic Acids. PhD thesis. U of Maryland. 1958

Oxidative metabolic pattern of normal and ketolic cow liver incubated with 1-C^{14}-labeled aliphatic acids. Co-authors A C Chung, J C Shaw. Proc Sox Exp Biol Med. 1959

D C Church

Graduate Specialization: Animal Nutrition

Memberships: AZ, GSD, SX, ASAP, ADSA

Publications: Vitamin A studies with beef cows. Co-authors L S Pope, R MacVicar, C K Whitehair, W D Campbell. Okla AEX Misc pub 43. 1955

Effect of plane of nutrition on the carotene requirements of beef cows during early lactation. Co-authors L S Pope, R MacVicar. J An Sci. 1955

Effect of plane of nutrition of beef cows on depletion of liver vitamin A during gestation and on carotene requirements during lactation. Co-authors L S Pope, R MacVicar. J An Sci. 1956

Vitamin A studies with beef cattle. PhD thesis. Okla State University. 1956

Agronomic and biochemical evaluation of genotypes of tall fescue (Festuca arundinacea). II. Digestibility, energy and nitrogen balance among three selections with sheep. Co-authors J R Schubert, J R Cowan, J E Oldfield. Proc West Sec Am Soc An Prod. 1958

D C Church (Cont'd)

Effect of various non-nutritive additives in a lamb fattening ration. Co-author C W Fox. Feedstuffs. 1958

Nutritional use of tranquilizers. Proc 16th An Ore An Ind Conf. 1958

Effect of pellet size and roughage grind on performance of fattening lambs. Co-authors C W Fox, J A B McArthur. Proc West Sec Am Soc An Prod. and J An Sci. 1959

Lamb response to three experimental feeding methods. Co-author C W Fox. Proc West Sec Am Soc An Prod. and J An Sci. 1959

Effect of several enzyme concentrates on cellulose digestion in the artificial rumen. Co-author D M Bowden. J An Sci. (To be presented at Am Soc An Prod An Mtg) 1959

Effect of several variables on in vitro fermentation. Co-author R G Petersen. J Dairy Sci.

Paul C Berger

Graduate Specialization: Dairy Production

R W Mason

Graduate Specialization: Animal Breeding, Physiology, Genetics, Biochemistry

Memberships: PKP, AZ, SX

Publications: Thyroid, pituitary and body size in rabbits. Co-authors Hugo Krueger, John Kaufmes, D A Price, Ralph Bogart. Proc West Sec Am Soc An Prod. 1955

Body measurements, gains and feed efficiency of growing beef cattle. Co-authors Ralph Bogart, George Nelms, Donald A Price. Abs J An Sci. 1955

Growth rate, feed efficiency and thyroid activity in male mice of different strains and strain crosses. Co-authors Ralph Bogart, Hugo Krueger. Proc West Sec Am Soc An Prod. 1956

A urine collecting apparatus for bulls and heifers. Co-authors G Nelms, Ralph Bogart. Proc West Sec Am Soc An Prod. 1956

Strain differences of thyroids in mice. Co-authors Hugo Krueger, Ralph Bogart. Abs Am Jour Physiol. 1956

Inherited differences in vitamin requirements among mice. Abs J Pharm & Exp Therapeutics. 1957 Co-authors Hugh Nicholson, Ralph Bogart, Hugo Krueger.

Testosterone administration to young bovine females prior to pregnancy. Co-authors Hugh Nicholson, Ralph Bogart, Hugo Krueger. Abs J Pharm & Exp Therapeutics. 1957.

Effects of feeding red clover (Trifolium pratense) on reproduction in laboratory mice. Co-authors C W Fox, J Kaufmes, J E Oldfield. Proc West Sec Am Soc An Prod. 1957

R W Mason (Cont'd)

The effects of injected testosterone into lactating rats on the suckling gains of their offspring. Co-authors Hugo Krueger, Hugh Nicholson, John Kaufmes, Ralph Bogart. Abs J Pharm & Exp Therapeutics. 1958

Urogenital anomalies in calf born to beef cow treated with testosterone during pregnancy. Co-authors J T Bone, Ralph Bogart, Hugo Krueger. Abs J Pharm & Exp Therapeutics. 1958

Effect of injected testosterone on fertility in female cattle and sheep. Co-authors Ralph Bogart, Frank Hudson, Hugh Nicholson, Hugo Krueger. Int J Fert. 1958

Genetic aspects of fertility in mice. Co-authors Ralph Bogart, Hugh Nicholson, Hugo Krueger. Int J Fert. 1958

Effects of incorporation of red clover or estradiol in the diet on reproductive organs of mice. Co-authors C W Fox, J E Oldfield, John Kaufmes. Proc West Sec Am Soc An Prod. 1958

Heritability estimates as affected by sex, genetic-environmental interaction, and type of selection practices. Co-authors Ralph Bogart, Hugo Krueger. Proc West Sec Am Soc An Prod. 1958

Methods of adjusting data for differences due to sex. Co-authors Ralph Bogart and Hugo Krueger. Proc West Sec Am Soc An Prod. 1958

Preponderance of hybrid losses or negative heterosis in mouse crosses. Co-authors H Nicholson, R Bogart, Hugo Krueger. Abs Biometrics. 1959

Effects on fertility of feeding red clover to mice. Co-authors R L Manning, C W Fox, J E Oldfield. Abs Fed Proc. March, 1959

Strain and sex differences in effects of thiouracil. Co-authors Hugo Krueger, Sucheep Ratarasarn, Ralph Bogart. Abs Fed Proc. March, 1959

Preponderance of hybrid losses or negative heterosis in mouse crosses. Co-authors H Nicholson, R Bogart, Hugo Krueger. Biometrical Genetics (in press) 1959

The effects of injected testosterone into lactating mice on the suckling gains of their offspring. Co-authors Hugh Nicholson, John Kaufmes, Ralph Bogart, Hugo Krueger. Abs Ore Acad Sci (in press)

Relationship of suffocation time to rate of gain, food intake, and thyroid weight in male mice from strain crosses. Co-authors Ralph Bogart, Hugo Krueger. Abs Ore Acad Sci (in press)

Inherited endocrine relationships affecting fertility in mice. Co-authors Ralph Bogart, Hugo Krueger. Abs Ore Acad Sci (in press)

Passage of testosterone across the placenta. Co-authors Stewart Floyd, Frank Hudson, Hugh Nicholson, Ralph Bogart, Hugo Krueger. Abs Ore Acad Sci (in press)

Species differences in effects of testosterone. Co-authors Frank Hudson, Hugh Nicholson, Ralph Bogart, Hugo Krueger. Abs Ore Acad Sci (in press)

R W Mason (Cont'd)

Selection for body weight in synthetic monoparous populations of mice. PhD thesis, OSC. June, 1959

Selection for body weight in synthetic monoparous populations of mice. Abs Dissertation abstracts. 1959

John Adair

Membership: National Wildlife Society

Publications: Identification of cystine calculi in mink. Co-authors J E Oldfield, Paul H Allen. Proc Soc Exp Biol & Med. 1956

Mink nutrition research. Progress report, OAES, May 1955

Mink nutrition research. Progress report, OAES, May 1956

1956 Mink nutrition research. Co-author Kenneth G Davis. OAES Misc paper 41. May, 1957

Improving mink nutrition. Co-authors F M Stout, J E Oldfield. 1957 Progress report. OAES Misc paper 58. July, 1957

C E Conrad

Graduate Specialization: Range Management

Memberships: Sigma Xi, Am Soc of Range Mgt

F M Stout

Graduate Specialization: Animal Nutrition, Genetics

Memberships: ASAP, SX, Phi Sigma, PKP

Publications: The effect of antibiotic growth stimulants on blood and carcass constituents in swine. MS thesis, OSC. 1958

Improving mink nutrition. Co-authors John Adair, J E Oldfield. OAES Misc paper 58. July, 1958

New developments in mink nutrition. Co-authors John Adair, J E Oldfield. OAES Misc publ 80. Sept, 1959

Nature and cause of the cotton fur abnormality in mink. Submitted to J Nutr. October, 1959

Wm C Van Arsdel, III

Graduate Specialization: Physiology, Pharmacology, Zoology, Biochemistry

Membership: Sigma Xi

Publications: Heart sounds of domestic animals. Co-authors John Weinemann, Hugo Krueger. Proc West Sec Am Soc An Prod. 1956

Diet induced cardiac arrhythmia in a beef calf. Co-authors H Krueger, J E Oldfield. Pr West Sec ASAP. 1956

Wm C Van Arsdel, III (Cont'd)

Lead selection, cardiac axes and the interpretation of electrocardiograms in beef cattle. PhD thesis, OSC. 1959

R S Driscoll

Graduate Specialization: Range Management, Statistics, Animal Husbandry

Memberships: Am Soc Range Mgt, Beta Beta Beta, Xi Sigma Pi, Sigma Xi

Publications: Grazing season determined by forage maturity. Oregon Cattleman. 1955

A guide to the Starkey Experimental Forest and Range. USFS Pacific NW Forest & Range Exp Sta processed. 1955

Effect of intensity and date of herbage removal on herbage production of elk sedge. Unpub Master's thesis, Colo State Univ. 1957

Hauling water for range cattle. Co-author David F. Costello. USDA leaflet 419. 1957

New answers to old problems. West Livestock Journal. 1958

A loop method for measuring ground cover characteristics on permanent plots. Jour Range Mgt. 1958

INSTRUCTIONAL STAFF

Department: Farm Crops

Faculty Member	Nature of Appoint-ment	Ten-ure	Years of Service (OSC)	Years of Teaching or Profes-sional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institu-tions	Graduate Work Beyond Highest Degree Held
J R Cowan	Prof 12 mo	I	11	22	.52	.28	.20[1]	BSA Toronto MS U Minn PhD U Minn	
D D Hill	Prof 3 mo	I	32	34	.25			BS OSC MS Kan St PhD Cornell	Exch Prof Rutgers '51
R L Davis	Prof 12 mo	Y	-	9	.75	.25		BS Auburn U MS Purdue PhD Purdue	
W H Foote	Prof 12 mo	I	11	16	.40	.45	.15	BS Utah St MS Minn U PhD Minn U	
C E Poulton	Prof 12 mo	I	10½	22	.225	.275		BS U Ida MS U Ida PhD WSU	
D W Hedrick	Assoc Pr 12 mo	I	8	22	.17	.33		BS WSU MS U Cal PhD Tex A&M	
L A Jensen	Assoc Pr 12 mo	I	18	26	.18	.82		BS CSU	Plant Phy Rutgers,OSC
W R Furtick	Assoc Pr 12 mo	I	9	9	.36	.57	.07[1]	BS Kan St MS OSC PhD OSC	
W S McGuire	Assoc Pr 12 mo	I	3	12	.60	.40		BS U Ark MA Sc U NZ PhD WSU	

T M Ching	Asst Pr 12 mo	Y	3	9	.10	.90	BS China MS China PhD MSU	Crs Math & Biochem
H L Schudel	Asst Pr 3 mo	Y	10	12½	.30		MS U Neb PhD OSC	
D O Chilcote	Instr 12 mo	Y	6	6	.50	.50	BS OSC MS OSC	Purdue now for PhD
R H Callihan	Instr 12 mo	Y	2	2½	.50	.50	BS U of I	12 mo
M L Swearingin	Instr 6 mo	Y	1	3½	.70		BS U Mo MS U Mo	2 yrs OSC
K H McGuire	Grad Ast 12 mo	Y	1	1	.60	.25	BS Ohio St MS Ohio St	3 qtrs OSC toward PhD
W E Kronstad	Instr 12 mo	Y		2	.60	.08	BS WSU MS WSU	8 hrs on PhD - OSC
R S Driscoll	Instr 12 mo	Y	1	10	.25	.25	BS Col A&M MS Col StU	Working on PhD
B G Wilcox	Grad Ast 9 mo	Y		3	.30		BS Utah SU	26 hrs

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1 Ag Tech Adv

INSTRUCTIONAL STAFF

Department: Farm Crops

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

J R Cowan

Graduate Specialization: Plant Genetics, Plant Pathology

Memberships: Am Soc Agronomy, Am Assn for Advancement of Science, Phi Sigma, AAUP, Fellow of Am Assn for Advancement of Science

Publications: What's ahead in tall fescue. Ag Progress. 1955

Relative seed and forage producing ability of selected clones of tall fescue. Western Grass Breeder's Work Planning Conf, Pullman, Wn, June 13-14, 1955. Ninth Western Grass Breeder's Work Planning Conf (Abs), June 13-14, 1955

Tall fescue. Advances in Agronomy. 1956

Future trends in agriculture as related to seed production. 11th An Mtg, Wn State Crop Impr Assn

Palatability differences in tall fescue as measured by grazing sheep. Co-authors R G Peterson, P H Weswig. Agronomy Jrl, March, 1958

Quality and persistent varieties of forage crops through a breeding program. An Mtg Joint Comm on Grassland Farming. Stanford Univ, August 29, 1957

Breeding for quality in tall fescue. Western Grass Breeders Work Planning Conf. Bozeman, Mont. July, 1957

Agronomic and biochemical evaluations of genotypes of tall fescue. I. Seasonal variations in crude protein dry matter in chromogen. Co-authors P H Weswig, Patricia M Buckley, R G Peterson. Proc West Sec ASAP. 1958

Agronomic and biochemical evaluations of genotypes of tall fescue. II. Digestibility energy in nitrogen balance among three selections with sheep. Co-authors J R Schubert, D C Church, J E Oldfield. Proc West Sec ASAP. 1958

Agronomic and biochemical evaluations of genotypes of tall fescue. III. The use of plant chromogens to predict dry matter digestibility. Co-authors R G Peterson, P H Weswig, P M Buckley. Proc West Sec ASAP. 1958

D D Hill

Graduate Specialization: Crop Quality

Memberships: AZ, PKP, SX

Publications: Agronomic observations in the southeast. Ore Seed Growers League. Proceedings. December, 1956

D D Hill (Cont'd)

Changes in the hop industry. Brewers digest. March, 1959

Feed production of the future. Ore An Ind Conf. Proc. January, 1959

Gorse control. OAES Bul 553. August, 1955

Grassland seeds by W A Wheeler and D D Hill. 1957

Hydrogen peroxide solutions for rapid determinations of barley viability. Co-author M C Parker. Abs. Agronomy Abstracts. 1955

The performance of several improved forage species on Laughlin-like soils in western Oregon. Co-authors V Valassis, D W Hedrick. Journal of Range Management. March, 1957. Tech paper 952

Results from harvest survey on Oregon forage and turf seed crops in 1953-54. Co-authors J E Harmond, L M Klein. Abs. Agronomy Abstracts. 1955

The seed program in Latin America. Oregon Seed Growers League. Proc. December, 1958

A survey of inert matter in multiple florets of certain grass seeds. Co-authors T M Ching, L A Jensen. Association of Official Seed Analysts. Proc. 1958. Tech paper 1143

A wheat research program for Pacific Northwest. Wash Sta Cir 293. 1956

They broke the trail (History of Ore Wheat Comm) unpublished 1959

R L Davis

Graduate Specialization: Plant Genetics, Plant Breeding

Memberships: SX, ASA

Publications: The inheritance of cold resistance and its relation to fall growth in F_2 and BC_1 generations of alfalfa. Co-author R J Kohel. Agronomy Jrl. In press

Morphological and physiological variations in three varieties of red clover. Co-author Eugene Pergament. Agronomy Jrl. In press

A study of quantitative inheritance of height and yield in Medicago sativa L. Co-author Eugene Pergament. Agronomy Jrl. In press

Inheritance of resistance to southern anthracnose in red clover. Co-author Kirk L Athow. Phytopathology. August, 1958

Tetrasomic inheritance of an elongated hypocotyl mutant in alfalfa. Agronomy Jrl. 1956

Development of an alfalfa having resistance to the meadow spittlebug. Co-author M Curtis Wilson. Purdue Ag Exp Sta Jrl paper 1165. October 25, 1957

Strain differences in the estrogenicity of alfalfa. Co-authors Martin Stob, F N Andrews. Jrl An Sci. November, 1957

R L Davis (Cont'd)

Reaction of alfalfa seedlings from dormant seeds subjected to various dosages of X-rays. Co-author R O Hammons. Agr Jrl. 1956

Response of alfalfa varieties to temperatures and daylengths. Co-authors M H Schonhorst, A S Carter. Agronomy Journal. 1957

The relationships of varieties and fertilization to observed symptoms of root rots and wilt of alfalfa. Co-authors R K Stivers, W A Jackson, A J Ohlrogge. Agronomy Journal. 1956

A rapid method for determining winterhardiness in alfalfa. Co-authors J B A Rodger, G G Williams. Agronomy Journal. 1957

Attractiveness of sweetclover varieties to the sweetclover weevil. Co-authors M C Wilson, B A Haws, H L Thomas. Jrl of Econ Entomology. August, 1956

An evaluation of S_1 and polycross progeny testing in alfalfa. Agronomy Journal. 1955

W H Foote

Graduate Specialization: Cereal Crop Breeding, Experimental Design, Crop Production

Memberships: ASA, SX, Phi Sigma, AZ, Am Genetic Assn, West Soc Crop Sci

Publications: Economics of growing malting barley. Co-authors William G Brown, T L Jackson. Plant Food Review. Spring, 1959

Field crop production and soil management in the Pacific Northwest. Co-authors H B Cheney, E G Knox, H H Rampton. Advances in Agronomy. 1956. Misc paper 22

Industrial crops class at OSC. Chemurgic Digest. June, 1959

Cereal variety recommendations for Oregon. Cir of Inf 575. 1959

Yellow dwarf virus in oats. Plant Disease Reporter. Nov, 1959

C E Poulton

Graduate Specialization: Forestry Range Management, Animal Nutrition, Ecology, Soils

Memberships: Phi Eta Sigma, Xi Sigma Pi, Phi Sigma, SX (Assoc, Ida), Am Soc Range Management, Soc Am Foresters, Ecological Soc Am, Soil Sci Soc Am & West Sec SSSA, Secty, Vice Chr & Chr of Range Div Soc Am Foresters, Assoc Ed Range Mgt Journal of Forestry

Publications: The research and marketing act supports range research. Jrl Range Mgt. March, 1955

Ecology of the non-forested vegetation in Umatilla and Morrow Counties, Oregon. PhD dissertation, WSC. 1955

C E Poulton (Cont'd)

Range Management Education--The Problem. Journal of Range Management. 1957

Collection of ecological data for soil-site correlation in Ore. Co-author E Anderson. Range Mgt, OSC and US Soil Conservation Ser. 1958

Division of Range Management--Its Service to Forestry. Jrl of Forestry. July, 1957

Ranchers, ranges and cows. Co-authors Elgin Cornett, Art Sawyer, Joe Johnson, E R Jackman. OSC Ext Ser Bul 772. March, 1958

Range resources. Co-author D W Hedrick. Atlas of Pacific Northwest. 2nd Ed. 1957

Soil-vegetation research and surveys in multiple use management of western ranges. Grasslands. Wash DC AAAS Pub 53. 1959

Book review for the Journal of Range Management. Henry J Oosting, The Study of Plant Communities. An Introduction to Ecology. 2nd Ed. 1956

Out on the range (Careers brochure). Co-author D W Hedrick. ASRM, OSC. 1959

D W Hedrick

Graduate Specialization: Range Management, Forestry, Animal Husbandry, Statistics

Memberships: ASRM, Xi Sigma Pi, SX (Mbr Res Comm), Mbr Council of NW Sec ASRM, Chr ASRM 1960 Prog Comm

Publications: Alfilaria (Erodium circutarium). OSC Ext Ser. Range Plant Leaflet 8. 1957

Book review. Journal of Range Management. Nov, 1956

Book review. Journal of Range Management. Mar, 1956

Clipping Treatments on Tall Fescue. Misc paper 53. Dec, 1957

Fertilizer treatments on tall fescue. Misc paper 52, Dec, 1957

Grass is the wealth. Co-authors E R Jackman, W W Chilcote, Gene Lear. Bul 770. Dec, 1957

Grazing and douglas fir establishment in the Oregon white oak type. Co-authors F C Hall, R J Keniston. Journal of Forestry. Feb, 1959

Grazing tall oatgrass. Crops and Soils. Dec, 1956

Green fescue (Festuca irridula). OSC Ext Ser. Range Plant Leaflet 9. 1957

Idaho fescue (Festuca idahoensis). OSC Ext Ser. Range Plant Leaflet 19. 1957

Managing sheep on hill pastures. Co-author Ralph Bogart. OSC AES Bul 554. Nov, 1955

D W Hedrick (Cont'd)

The performance of several improved forage species on Laughlin-like soils in western Oregon. Co-authors V Valassis, D D Hill. Journal of Range Management. March, 1957. Tech paper 952

Proper utilization--a problem in evaluating the physiological response of plants to grazing use: A review. Journal of Range Mgt. January, 1958. Misc paper 46

Range resources. Co-author C E Poulton. Atlas of Pacific Northwest. 2nd Ed. 1957

Range robbers--undesirable range plants. Co-authors W A Sawyer, Elgin Cornett, David F Costello, E R Jackman, W R Furtick, Barry N Freeman. OSC Ext Ser Bul 780. Dec, 1958

Review: The desert grassland by Robert R Humphrey. Botanical Review. Journal of Range Mgt. Jan, 1959

Sheep fescue (Festuca Ovina). OSC Ext Ser. Range Plant Leaflet 7. 1957

Subclover pastures. Co-author T L Jackson. OSC Ext Ser. Fertilizer Recommendations 15. Jan, 1958

What about our range management technical assistance programs? Journal of Range Management. Jan, 1955

Out on the range (Careers brochure) Co-author C E Poulton. ASRM and OSC. 1959

L A Jensen

Graduate Specialization: Plant Physiology

Memberships: Int Seed Testing Assn, Assn of Off Seed Analysts, Soc of Commercial Seed Tech, Am Seed Control Off, NW Forest Tree Seed Comm

Publications: Determination of inert matter in multiple florets of western grown fine fescues. Co-author T M Ching. Proc AOSA. 1957

Seed characteristics of certain wild barley, Hordeum Spp. Co-authors William R Johnston, Merle Pierpoint. Proc AOSA. 1957

Modified techniques, equipment and results of TZ tests on Poa Pratensis. Co-authors Merle Pierpoint, Peggy Hayes. Proc AOSA. 1957

Study of toxicity in germination paper. Crying Towel. Assoc Off Seed Anal News Letter. May, 1958

Testing freshly harvested crimson clover. Soc Comm Seed Tech News Letter. June, 1958

A survey of inert matter in multiple florets of certain grass seeds. Co-authors T M Ching, D D Hill. Proc AOSA. 1958

Activation of germination of highland bentgrass by infrared lamp. Co-author Merle Pierpoint. Proc AOSA. 1958

Some problems of delayed germination in Oregon grown bentgrass. News Letter of AOSA. 1953

Sampling experiments of coniferous tree seeds for testing. Co-author T M Ching. Proc AOSA. 1959 in publication

L A Jensen (Cont'd)

Experience in germination testing of Pacific Northwest Douglas-Fir seed. Co-author Esther Noll. Proc AOSA. 1959 in publication

Rules for service testing for tree seed of the Pacific Northwest. Co-authors D N Bever, J G Cameron, C Rindt, J B Woods, R Silen. OSC Misc paper 83. 1959

W R Furtick

Graduate Specialization: Herbicides

Memberships: ASA, Weed Soc of America, SX

Publications: Broadleaf weed control in legume crops with phenoxy butyric acids. Co-author D O Chilcote. Western Weed Control Conf. Res Comm. Res Prog Report. 1957

Chemical control of rabbitbrush. Co-authors D N Hyder, F A Sneva, D O Chilcote. Western Weed Control Conf. Res Comm. Res Prog Report. 1957

Chemical control of rabbitbrush with emphasis upon simultaneous control of big sagebrush. Co-authors D N Hyder, F A Sneva, D O Chilcote. Weeds. July, 1958

Chemical weed control in corn under conditions of furrow irrigation. Co-authors W Powell Anderson, E Neil Hoffman. Western Weed Control Conf. Res Prog Report. March, 1957

Chemical weed control in fiber flax. OAES Cir of Inf 572. Feb, 1957

Chemical weed control in grass. Co-author D O Chilcote. OAES Cir of Inf 551. Oct, 1955. Revised, May, 1957

Chemical weed control in mint. Co-author D O Chilcote. OAES Cir of Inf 559. March, 1956

Chemical weed control in wheat, barley, oats. Co-authors D G Swan, D O Chilcote. OAES Cir of Inf 557. April, 1956

A comparison of various herbicides for the control of horsetail rush (Equisetum arvense). Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

A comparison of various herbicides on Tansy Ragwort when applied at the rosette, bolt and bloom stages. Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

Control of common weeds. In Oregon Weed Control Handbook by Rex Warren. OSC Ext Ser. Feb, 1959

Control of Canada thistle (Circium arvense) with 3-amino-1,2,4-triazole, Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1958

Control of Dock, Canada thistle and Buttercup in mixed clover grass pastures with 4-(2,4-DB) and 4-(MCPB). Co-authors H B Howell, D O Chilcote. Western Weed Control Conf. Res Prog Report. March, 1957

W R Furtick (Cont'd)

Culturing perennial weeds for weed gardens. Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. March, 1957

Differences among butyl, ethyl, and isopropyl ester formulations of 2,4-D, 2,4,5-T, and MCPA in the control of big sagebrush. Co-authors D N Hyder, F A Sneva. Weeds. April, 1958

Economic studies of tarweed (Amsinkia intermedia) control in Eastern Oregon. Co-authors David E Bayer, D Curtis Mumford. Western Weed Control Conf. Research Prog Report. 1955

The effects of various substituted phenoxyacetic acids and their various formulations on Hannchen malting barley at two stages of application. Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

Effectiveness and residual life of certain soil sterilant materials under Western Oregon conditions. Co-author D O Chilcote. Western Weed Control Conf. Research Comm. Res Prog Report. 1958

The future in weed control. Farm Chemicals. April, 1957

Grass weed control in cereals. Oregon Weed Conf. Proc. Nov, 1958

Herbicides. Co-authors V H Freed, Roland Laning, Rex Warren. In: Ore Agr Chemical Applicator's Manual. 1956

Herbicides for better seed. Crops and Soils. March, 1959

The influence of 3-amitrol-1,2,4-triazole on growth yield, and germination of spring oats. Co-author D O Chilcote. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

A new approach in cereal weed control. Western Weed Control Conf. Proc. March, 1958

New chemicals found promising in Oregon during 1958. Oregon Weed Conf. Proc. November, 1958

New herbicides for weed control in field corn. Co-author D O Chilcote. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

Nutrient additives in growth-regulator solutions for the control of big sagebrush (Artemisia tridentata). Co-authors D N Hyder, F A Sneva. Western Weed Control Conf. Res Comm. Res Prog Report. 1957

Perennial herbaceous weeds. Project I. Summary. Western Weed Control Conf. Res Prog Report. March, 1957

Perennial herbaceous weeds. Summary of Project I. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

Preliminary results of the herbicidal activity of two new chemical groups: Chloro acetamides (CEAA & CDEA) and Dithio carbamates (CDEC & CDEA). Abs. Agronomy Abstracts. 1955

Pre-plant treatments with 3-amino-1,2,4,-triazole for Canada thistle...Control in cropland. Co-author D O Chilcote. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

Range robbers--Undesirable range plants. Co-authors W A Sawyer, Elgin Cornett, Don Hedrick, David F Costello, E R Jackman, Barry N Freeman. Ext Bul 780. December, 1958

W R Furtick (Cont'd)

Research findings with weed killers in field crops. Oregon Weed Conf. Proc. November, 1957

Selective annual weed control in cereal crops with Karmex diuron. Co-author D O Chilcote. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

Selective control of perennial weeds with hormone-type herbicides--Dalapon and Amino Triazole. Western Weed Control Conf. Proc. March, 1958

Selective weed control in field crops. In: Oregon Weed Control Handbook by Rex Warren. Ext Ser. February, 1959

Soil sterilants. In: Ore Weed Control Handbook, by Rex Warren. Ext Ser. February, 1959

The use of amino triazole and dalapon for the control of quackgrass (Agropyron repens). Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

The use of amino triazole on tansy ragwort in the rosette, bolt and bloom stages. Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

The use of dalapon on established stands of alfalfa, ladino clover, red clover, and lotus corniculatus. Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

The use of urea herbicides, Chloro -IPC, Dinitro Amine, Sodium Pentachlorophenate, Dalapon and Amino Triazole on peppermint. Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

The use of various herbicides for weed control in green beans and sweet corn. Co-author D O Chilcote. Western Weed Control Conf. Res Prog Report. 1955

The use of various herbicides for weed control in onions. Co-author D O Chilcote. Western Weed Control Conf. Res Pr Rep 1955

The use of various herbicides, Pre- and Post-emergence on yellow nutgrass (Cyperus esculentus). Co-author D O Chilcote. Western Weed Control Conf. Res Prog. Report. 1955

Weed control in field corn. Co-authors D O Chilcote, R E Fore. Western Weed Control Conf. Res Prog Report. March, 1957

Weed control in forage and seed crops. Ore Weed Control Conf Proc. Nov, 1955

Weed control in peppermint. Ore Essential Oil Growers League. Proc. January, 1955

Field crop weed research in Oregon. Co-author D O Chilcote. Ore Weed Control Conf. Proc. November, 1956

W S McGuire

Graduate Specialization: Crop Production, Pasture Management

Membership: Am Soc of Agronomy

T M Ching

Graduate Specialization: Cytogenetics, Plant Physiology

Memberships: Genetic Soc of Am, Societas Physiological Plantanum, SX, Xi Sigma Pi, Sigma Delta Epsilon, Am Soc of Plant Phys, AAAS, ASA

Publications: Some effects of herbicides on growth and cytological processes. Co-authors B H Greigsby, G B Wilson. Proc Southern States Weed-Control Conf. 1955

Some notes on the "C-mitotic" action of colchicine and technical lindane. Co-authors P A Hyypio, G B Wilson, Te May Tsou. Cytologia. 1955

The effect of potassium N-1-naphthylphthalamate on geotropic response and growth of corn, pea and oat seedlings. Co-authors R H Hamilton, R S Bandurski, B H Greigsby, G B Wilson. Proc North-Central Conf. 1955

Selective inhibition of the geotropic response by N-1-napthylphthalamic acid. Co-authors R H Hamilton, R S Bandurski. Physiol Plant. 1956

Seed quality as affected by moisture and temperature in storage. Proc 16th An Mtg Ore Seed Growers League. 1956

Determination of inert matter in multiple florets of western fine fescues. Co-author L A Jensen. Amer Off Seed Analyst Assoc. 1957

Evaluation of germinated seedlings of king green beans by greenhouse planting. Co-author M Pierpoint. AOSA Proc. 1957

Field emergence of king green beans. AOSA Newsletter, 1957

The role of phosphates in energy transfer (adenosine phosphates). Co-author R S Bandurski. Handbook of Plant Phys. Berlin, Germany. 1958

Some experiments on the optimum germination conditions for western hemlock (Tsuga heterophylla Sarg). J of Forestry. 1958

Hydrogen peroxide for rapid viability tests of some coniferous tree seeds. Co-author M C Parker. Forest Science. 1958

Moisture content of seed as it affects storage practice and seed viability. Proc 3rd Calif Seed Processor's Conf. 1958

Seed Trade News, April 30, 1958 and May 7, 1958

A survey of inert matter in multiple florets of certain grass seeds. Co-authors D D Hill, L A Jensen. AOSA Proc. 1958

Some histological and physiological studies on abnormal crimson clover seedlings. AOSA Proc. 1958

The redistribution of radioactivity in geotrophically stimulated plants pretreated with radioactive indoleacetic acid. Co-author S C Fang. Physiol Plant. 1958

Safer seed storage. Crops and Soils. December, 1958

Extracting Douglas-fir pollen and effects of gibberellic acid on its germination. Co-author K K Ching. Forest Science. 1959

How your seeds behave after harvest, in storage and during shipping. Proc 18th An Mtg Ore Seed Growers League. Dec, 1958

T M Ching (Cont'd)

Keeping field seed quality in storage and transit. Western Feed & Seed. Oct, 1959

Activation of germination in Douglas-fir seed by hydrogen peroxide. Plant Physiology. 1959

Interaction of moisture and temperature on viability of forage seeds stored in hermetically sealed cans. Co-authors M C Parker, D D Hill. Agron Journal. 1959

Change of forage seed quality under different simulated shipping conditions. Co-authors H L Taylor, P T Rowell. Agron Jnl. 1960

Some evidences of premature stoppage of sugar maple sap production. Co-author L W Mericle. Forest Science. 1960

H L Schudel

Graduate Specialization: Field Crop Production

Publication: Home Lawns for Oregon. Ore Sta Bul 516. In publication

D O Chilcote

Graduate Specialization: Herbicides

Memberships: Agronomy Soc, AZ, SX

Publications: Research in progress on soil sterilization, perennial weed and brush control. Ore Weed Conf. Proc. November, 1955

Profitably controlling Canada thistle. Western Weed Control Conf. Proc. March, 1958

New chemicals' effects on common weeds and crops. Ore Weed Conf. Proc. November, 1955

Control of Canada thistle. Ore Weed Conf. Proc. Nov, 1958

Chemical brush control. In Ore Weed Control Handbook by Rex Warren. OSC Ext Ser. February, 1959

Broadleaf weed control in legume crops with phenoxy butyric acids. Co-author W R Furtick. Western Weed Control Conf. Res Comm. Res Prog Report. 1957

Chemical control of rabbitbrush. Co-authors D N Hyder, F A Sneva, W R Furtick. Western Weed Control Conf. Res Comm. Res Prog Report. 1957

Chemical control of rabbitbrush with emphasis upon simultaneous control of big sagebrush. Co-authors D N Hyder, F A Sneva, W R Furtick. Weeds. July, 1958

Chemical Weed Control in Grass. Co-author W R Furtick. OAES Cir of Inf 551. October, 1955. Revised May, 1957

Chemical weed control in mint. Co-author W R Furtick. OAES Cir of Inf. March, 1956

Chemical weed control in wheat, barley, oats. Co-authors D G Swan, W R Furtick. OAES Cir of Inf 557. April, 1956

D O Chilcote (Cont'd)

A comparison of various herbicides for the control of horsetail rush (Equisetum arvense). Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1955

A comparison of various herbicides on tansy ragwort when applied at the rosette, bolt and bloom stages. Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1955

Control of Canada thistle (Circium arvense) with 3-amino-1,2,4-triazole. Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1958

Control of dock, Canada thistle and buttercup in mixed clover grass pastures with 4-(2,4-DB) and 4-(MCPB). Co-authors H B Howell, W R Furtick. Western Weed Control Conf. Res Prog Report. March, 1957

Culturing perennial weeds for weed gardens. Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. March, 1957

The effects of various substituted phenoxyacetic acids and their various formulations on Hannchen malting barley at two stages of application. Co-author W R Furtick. West Weed Control Conf. Res Prog Report. 1955

Effectiveness and residual life of certain soil sterilant materials under Western Oregon conditions. Co-author W R Furtick. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

The influence of 3-amitrol-1,2,4-triazole on growth yield, and germination of spring oats. Co-author W R Furtick. Western Weed Control Conf. Res Comm. Res Comm. Res Prog Report. 1958

New herbicides for weed control in field corn. Co-author W R Furtick. Western Weed Control Conf. Res Comm. Res Pr Rep,1958

Pre-plant treatments with 3-amino-1,2,4,-triazole for Canada thistle...Control in cropland. Co-author W R Furtick. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

Selective annual weed control in cereal crops with karmex diuron. Co-author W R Furtick. Western Weed Control Conf. Res Comm. Res Prog Report. 1958

The use of amino triazole and dalapon for the control of quackgrass (Agropyron repens). Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1955

The use of amino triazole on tansy ragwort in the rosette, bolt, and bloom stages. Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1955

The use of dalapon on established stands of alfalfa, ladino clover, red clover, and lotus corniculatus. Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1955

The use of urea herbicides, chloro-IPC, dinitro amine, sodium pentachlorophenate, dalapon and amino triazole on peppermint. Co-author W R Furtick. Western Weed Control Conf. Res Prog Re.1955

The use of various herbicides for weed control in green beans and sweet corn. Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1955

D O Chilcote (Cont'd)

The use of various herbicides for weed control in onions. Co-author W R Furtick. West Weed Control Conf. Res Prog Rep. 1955

The use of various herbicides, pre- and post-emergence on yellow nutgrass (Cyperus esculentus). Co-author W R Furtick. Western Weed Control Conf. Res Prog Report. 1955

Weed control in field corn. Co-authors W R Furtick, R E Fore. Western Weed Control Conf. Res Prog Report. March, 1957

Field crop weed research in Oregon. Co-author W R Furtick. Ore Weed Control Conf. Proc. November, 1956

R H Callihan

Graduate Specialization: Farm Crops

M L Swearingin

Graduate Specialization: Field Crop Production, General Botany, Genetics

Memberships: Am Soc of Agronomy, Gamma Sigma Delta

K H McGuire

Graduate Specialization: Plant Breeding

Memberships: ASA, CSSA

W E Kronstad

Graduate Specialization: Plant Breeding

Membership: Sigma Xi

Publications: Mutagenic effect of oxygen on barley seeds. Co-authors R A Nilan, C F Konzak. Science. June 12, 1959

After effects of ionizing radiation in Barley II. Differential influence on induced chromosome aberration and mutation frequence by oxygen and argon at low dosages of X-rays. International Journal of Radiation. In press

Radiobiological studies in barley. Co-authors R A Nilan, D F Konzak. Barley Newsletter. 1958

Mutagenic effect of oxygen on barley seeds. Co-author R A Nilan. Barley Newsletter. 1958

R S Driscoll

Graduate Specialization: Range Management, Ecology, Statistics, Soils

Memberships: Am Soc of Range Mgt, SX, Xi Sigma Pi

Publications: Grazing season determined by forage maturity. Oregon Cattleman. 1955

A guide to the Starkey Experimental Forest and Range. USFS. Pac NW For and Range Exp Sta. 1955

Hauling water for range cattle. Co-author David F. Costello. USDA Leaflet 419. 1957

New answers to old problems. Western Livestock Journal. 1958

A loop method for measuring ground cover characteristics on permanent plots. Jour Range Management. 1958

B G Wilcox

Graduate Specialization: Farm Crops, Range Production

INSTRUCTIONAL STAFF

Department: Fish and Game Management

Faculty Member	Nature of Appointment	Tenure	Years of Service (OSC)	Years of Teaching or Professional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institutions	Graduate Work Beyond Highest Degree Held
R E Dimick	Prof 12 mo	I	30	33	.80	.20		BS OSC MS OSC	
J B Long	Assoc Pr 10 mo	I	20	21	1.00			BS OSC MS OSC	18 qtr hrs
L W Kuhn	Assoc Pr 12 mo	I	15	15	.88	.12		BS Iowa SC MS OSC	
C E Bond	Assoc Pr 12 mo	I	10	13	.76	.24		BS OSC MS OSC	1 yr U Cal U Mich now on Doct.
C E Warren	Assoc Pr 12 mo	I	6	6	.54	.46		BS OSC MS OSC	'51-53 U Cal on PhD Zool
H F Horton	Instr 12 mo	Y	1	3	.85	.15		BS Cal Poly MS OSC	Work PhD done except thesis at OSC
P Doudoroff	Courtesy Prof	Y	6	17				AB Stanford PhD U Cal	

INSTRUCTIONAL STAFF

Department: Fish and Game Management

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

R E Dimick

Graduate Specialization: Entomology, Zoology

Memberships: Pacific Fishery Biologist, Sigma Xi, Am Assoc Adv Sci, Gamma Sigma Delta, Phi Sigma, Kappa Delta Pi, Ore Marine Biol Soc

Publication: Training in wildlife management. Ore State Game Comm Bul. 1955

J B Long

Graduate Specialization: Rodent Control

Memberships: Phi Kappa Phi, AZ, PS

Publication: A smokehouse for the sportsman and hobbyist. Co-authors Huber, Onsdorff. Ext Bul 78. 1959

L W Kuhn

Graduate Specialization: Forest Big Game Management

Memberships: GSD, PS, Wildlife Society

Publication: Rodenticides. In The Ore Agric Chemical Applicators Manual. St Dept Ag, Div Plant Inds Publ. 1956

C E Bond

Graduate Specialization: Ichthyology

Memberships: SX, PKP, PS, AZ, Pac Fish Biol, Am Soc Ichs and Herps

Publications: Records on the tadpole madtom, Schilbeodes mollis, and the black bullhead, Ameirus melas, from Oregon and Idaho. Co-author L Bisbee. Copeia. 1955

The problem of farm pond weed control. Proc 4th Ore Weed Conf. 1955

Experimental control of Elodea densa and other aquatic weed. Proc 36th An Conf West Assoc St Game & Fish Comm. 1956

Aquatic weed control. Ore Agric Chem Applicators Manual. Jan, 1956

C E Bond (Cont'd)

Avoidance reactions of salmonid fishes to pulp mill effluents. Co-authors B F Jones, C E Warren, P Doudoroff. Sewage and Indust Wastes. 1956

Aquatic weed control. Ore Weed Control Handbook. Feb, 1959

The bigfin eelpout, Aprodon cortezianus, Gilber, common in waters off Oregon. Co-author J M Bali. Copeia, 1959

C E Warren

Graduate Specialization: Fisheries, Zoology, Statistics

Memberships: SX, PS, AZ, PKP, AAUP

Publications: Avoidance reactions of salmonid fishes to pulp mill effluents. Co-authors B F Jones, C E Bond, P Doudoroff. Sewage and Industrial Wastes. 1956

Coop research at OSC in the biological aspects of water pollution. In Biological problems in water pollution. R A Taft Sanitary Engr Center, USPHS, Cincinnati, Ohio. Co-author P Doudoroff. 1957

Biological indices of water pollution, with special reference to fish populations. In Biological problems in water pollution. Co-author P Doudoroff. 1957

The development of methods for using bioassays in the control of pulp mill waste disposal. Co-author P Doudoroff. Tappi. 1958

Some experiments on the dissolved oxygen requirements of cold-water fishes. Co-authors R C Davison, W P Breese, P Doudoroff. Sewage and Industrial Wastes. 1959

The ability of some salmonids and a centrarchid to swim in water of reduced oxygen content. Co-authors M Katz, A Pritchard. Transactions of American Fisheries Society. 1959

Avoidance reactions of some freshwater fishes to water of low oxygen content. Co-authors C Whitmore, P Doudoroff. Transactions of American Fisheries Society. In press. 1959

H F Horton

Graduate Specialization: Fisheries, Hatchery Biology

Memberships: SX, PKP, Beta Beta Beta, Am Fish Soc, Wildlife Soc, Pacific Fishery Biologist

Publications: An evaluation of some physical and mechanical factors important in reducing delayed mortality of hatchery-reared rainbow trout. Prog Fish-Cult. 1956

Effect of Rauwolfia alkaloids on the oxygen consumption rate of hatchery-reared rainbow trout. Prog Fish-Cult. 1957

H F Horton (Cont'd)

Oregon's aerial fish planting program. Co-author R L Borovicka. Trans Amer Fish Soc. 1957

P Doudoroff

Graduate Specialization: Fish Physiology, Toxicology, Chemistry

Publications: Report of the committee on water pollution. Trans Amer Fish Soc. 1955

Some experiments on the toxicity of complex cyanides to fish. Sewage and Indust Wastes. 1956

Avoidance reactions of salmonid fishes to pulp mill effluents. Co-authors B F Jones, C E Warren, C E Bond. Sewage and Indust Wastes. 1956

Cooperative research at OSC in the biological aspects of water pollution. In Biological problems in water pollution. USPHS. Co-author C E Warren. 1957

Biological indices of water pollution, with special reference to fish populations. In Biological problems in water pollution. USPHS. Co-author C E Warren. 1957

Water quality requirements of fishes and effects of toxic substances. In The Physiology of Fishes. 1957

Report of the Committee on Water Pollution. Trans Amer Fish Soc. 1958

The development of methods for using bioassays in the control of pulp mill waste disposal. Co-author C E Warren. Tappi. 1958

Experiments on the dissolved oxygen requirements of cold-water fishes. Co-authors R C Davison, W P Breese, C E Warren. Sewage and Indust Wastes. 1959 In press

Avoidance reactions of salmonid and centrarchid fishes to low oxygen concentrations. Co-authors C M Whitmore, C E Warren. Trans Amer Fish Soc. 1959 In press

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INSTRUCTIONAL STAFF

Department: Food and Dairy Technology

Faculty Member	Nature of Appointment	Tenure	Years of Service (OSC)	Years of Teaching or Professional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institutions	Graduate Work Beyond Highest Degree Held
H W Schultz	Prof 12 mo	I	6	25	.50	.40	.10	BA Colo C MS Iowa StU PhD Iowa SU	
G A Richardson	Prof 12 mo	Y	12	33	.50	.40	.10	BS Toronto MS Minn PhD Minn	
E M Litwiller	Prof 12 mo	Y	17	27	.29	.71		BS Kan St MS Kan St PhD OSC	
R F Cain	Assoc Pr 12 mo	I	8	20	.45		.55	BS Tex Tech MS Tex A&M PhD OSC	
R O Sinnhuber	Assoc Pr 12 mo	I	16	18	.25	.75		BS Mich St MS OSC	1 year
R W Stein	Assoc Pr 12 mo	I	7	22	.30	.30	.40	BS OSC MS OSC	
C E Samuels	Assoc Pr 12 mo	I	11	13	.90	.10		BS Cal MS Mich St	2 years
H Y Yang	Assoc Pr 12 mo	I	12	16	.20	.80		BS Nanking MS OSC PhD OSC	
T Onsdorff	Assoc Pr 12 mo	I	34	34	.20	.75	.05[1]	BS OSC MS Mass St	
C J Wilder	Assoc Pr 12 mo	I	14	18	.25	.75		BS Mont St MS Mont St	1 year
O J Worthington	Assoc Pr 12 mo	I	12	30	.20	.80		BS Rh Is MS Wisc PhD Wisc	1 year

E W Harvey	Assoc Pr 12 mo	I	12	19		1.00		BS Mass MS Mass PhD Mass	
J H Dietz	Asst Pr 12 mo	I	3	8	.50	.50		BS OSC MS Mass PhD Mass	
E A Day	Asst Pr 12 mo	Y	1	3	.15	.85		BS Maryld MS Penn St PhD Penn St	
Lois A Sather	Asst Pr 12 mo	I	7	10	.10	.90		BS OSC	
A F Anglemier	Asst Pr 12 mo	I	3	4		1.00		BS Fresno MS OSC PhD OSC	
J O Young	Asst Pr 12 mo	I	9	9	.25	.67	.08[1]	BS OSC MS OSC	2 years
A H Bockian (now resigned)	Asst Pr	Y	4	5	.20	.80		BS City CNY MS UCLA PhD Calif	
D K Law	Asst Pr 12 mo	I	11	15		1.00		BS OSC	
W A Sistrunk	Instr 12 mo	Y	3	11		1.00		BS SW La In MS OSC PhD OSC	
Teh Chu Yu	Instr 12 mo	Y	5	8		1.00		BS Fukien Ch Univ MS OSC	1½ years

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[1] Ag Tech Adv

INSTRUCTIONAL STAFF

Department: Food and Dairy Technology

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

H W Schultz

Graduate Specialization: Biochemistry, Nutrition, Physiology

Memberships: Phi Kappa Phi, Phi Tau Sigma, Sigma Xi, Phi Lambda Upsilon

Publications: Filbert research at OSC. The Northwest Nut Bowl. June, 1954

Research in the Food Technology Dept at OSC. Western Canner & Packer. May, 1956

Diversification of pear usage. OAES. 1956

Use of three-dimensional color pictures in consumer preference studies of beef. Proc of 8th Res Conf Council on Res. AMI. March, 1956

Concomitant use of radiation with other processing methods. Food Tech. 1956

Effect of ionizing radiation on acceptance of foods. Pub by US Govt Prtg Office. 1956

Flavor of foods sterilized by combining conventional processing with ionizing radiations. PB 121302, US Dept of Comm Office of Tech Serv. 1956

Developments in OSC technology: New curriculum and new research. Western Canner and Packer. May, 1957

Mechanical methods of measuring tenderness of meat. Proc Rec Meat conference 10. 1957

Research makes markets. Pub by Swift & Co. May, 1958

Chemicals in Foods. Jr Am Dietetic Assn. May, 1958

New program at OSC brings packer problems and research together. Western Canner and Packer. May, 1958

Relation of laboratory measurements of fresh beef quality to consumer preference obtained from a survey using three-dimensional color pictures. OAES. 1958

Relation of beef grades to consumer preference as obtained from a survey using three-dimensional color pictures. Proc of Western Sec Amer Soc of An Prod. 1958

G A Richardson

Graduate Specialization: Agricultural Biochemistry, Dairy Chemistry, Dairy Technology

Memberships: Am Chemical Soc, Am Dairy Science Assn, Inst of Food Tech, Ore Academy of Sciences, AAAS, SX, Alpha Zeta, Phi Lambda Upsilon

G A Richardson (Cont'd)

Publications: The energy basis for evaluating milk. Proc 12th An Ore An Ind Conf. OSC. February, 1954

Cream and de-fatted cream. Guernsey Breeders' Jr. March, 1954

Effect of added hypochlorite on detergent activity of alkaline solutions in recirculation cleaning. Jour of Milk & Food Tech. May, 1954

Differentials in milk evaluation. Proc 35th An Mtg, W Div Am Dairy Sci Assn. July, 1954

A practical method for estimating the color of the fat in cream and for calculating the amount of required color. Dairy Ind Week, Mont SC. November, 1954

Price-tagging the nutrients of milk. Dairy Industry Week, MSC. Nov, 1954

The effect of agitation of warm milk on stability toward alcohol and lipolysis. Proc 36th An Mtg Am Dairy Sci Assn West Sec. July, 1955

Notes on lipase activity and associated problems from pipelines and bulk handling of milk. An Mtg Idaho Milk Proc Assn. Dec, 1955

Evaluation of the nutrients of milk and milk products. Proc 37th Assn Mtg West Div Am Dairy Sci Assn. Jr Dairy Sci. 1956

Colorimetric determination of lactose in milk using the phenol-sulfuric acid reaction. Proc 38th An Mtg West Div Am Dairy Sci Assn. July, 1957

Dehydroquercetin as an antioxidant for milk. Jour Dairy Science. 1959

E M Litwiller

Graduate Specialization: Food Technology, Bacteriology, Chemistry

Memberships: Phi Delta Kappa, SX, Inst of Food Tech, Phi Sigma, PKP, GSD

Publications: Dehydrated green beans developed for Army. Ore Veg Digest. Oct, 1954

The effects of various sweetening agents on frozen strawberries for preserve manufacture. Food

Dehydrated Blue Lake green beans. Food Tech. 1957

R F Cain

Graduate Specialization: Food Technology, Horticulture, Plant Pathology

Memberships: SX, PKP, Inst of Food Technologists

Publications: Field behavior and processing characteristics of Blue Lake beans. OAES. 1954

R F Cain (Cont'd)

A new method of presentation of food samples to the Hunter color and color difference meter. Sci. 1954

Measuring sweet corn maturity. Ore Veg Digest. July, 1954

Differences in eating quality of sweet corn hybrids. Ore Veg Digest. July, 1955

The effect of low methoxyl pectin and calcium salts on the drained weight and calcium content of processed raspberries. Food Tech. 1955

Rapid sugar extraction procedure for analysis of candied fruits, jams, and fresh fruits. Ag & Food Chem. 1955

Concomitant use of radiation with other processing methods for meat. Food Tech. 1956

Methods of presenting raspberry and strawberry samples to the hunter color and color difference meter. Food Tech. 1956

The effect of intermittent radiation and concomitant increase in temperature during radiation on the acceptability of ground beef. Food Tech. 1956

Studies on a radio-resistant micrococcus. I. Isolation, morphology, cultural characteristics and resistance to gamma radiation. Food Tech. 1956

Effect of ionizing radiations on acceptance of foods. USAEC. Jan, 1956

Vitamin K_5 as a food preservative. Food Tech. 1958

Acceptability of fresh and precooked radiated meats. Food Research. 1958

Effect of radiation on antibiotic treated meats. Food Tech. 1958

Ultraviolet exposure studies on a gamma resistant micrococcus isolated from food. Food Research. 1959

R O Sinnhuber

Graduate Specialization: Research Fisheries Technology, Biochemistry of Marine Products, Nutrition of Salmon, Fat Oxidation, Irradiation Preservation of Seafoods

Memberships: Am Chem Soc, Am Oil Chem Soc, AAAS, Inst Food Tech, Ore Academy of Sci, Pac Fisheries Tech, SX, Phi Lambda Upsilon, Alpha Chi Sigma

Publications: Third prog report on spring Chinook salmon diet experiments. Fish Comm Research Briefs. 1958

Fish processing - Expression of oil from dried fish meal. Ag and Food Chem. 1954

Stimulatory effect of calcium on growth of facto bacillus Fermenti. Proc Soc Exp Biol & Med. 1955

Fourth Prog report on salmon diet experiments. Fish Comm Research Briefs. 1955

R O Sinnhuber (Cont'd)

Fifth prog report on salmon diet experiments. Research Briefs Fish Comm of Oregon. 1955

Variation of proximate composition of right and left fillets of rockfish (Sebastodes Pinniger) and dover sole (Microstomas Pacificus). Commercial Fisheries. 1956

2-Thiobarbituric acid method for the measurement of rancidity in fishery products. Food Tech. 1957

2-Thiobarbituric acid method for the measurement of rancidity in fishery products. II. The quantitative determination of malonaldehyde. Food Tech. 1958

Marion Forks fourth nutritional experiment. Fish Comm of Ore coop OAES Seafoods Lab. 1957

Vitamin K_5 as a food preservative. Food Tech. 1958

Characterization of the red pigment formed in the 2-thiobarbituric acid determination of oxidative rancidity. Food Research. 1958

Roy W Stein

Graduate Specialization: Dairy Products Manufacturing

Memberships: Am Dairy Sci Assn, Western Div ADSA, National Assn Milk and Food Sanitarians, Inst of Food Technologists

C E Samuels

Graduate Specialization: Food Technology, Food Bacteriology, Horticulture and Biochemistry

Memberships: Inst of Food Tech, Sigma Xi

Publications: Mandatory standards program on quality factors for frozen asparagus and peas -- II. Selection of official analytical procedures. Food Tech. October, 1954

New washing technique ups berry throughput. Food Engr. September, 1956

H Y Yang

Graduate Specialization: Food Fermentation

Memberships: Inst of Food Tech, Am Chem Soc, Am Soc of Enologists, SX, Phi Sigma, Gamma Sigma Delta, Phi Tau Sigma

Publications: Stabilizing apple wine with glucose oxidase. Food Research. 1955

Selection of fruits and berries in wine production. Am Journal Enology. 1955

H Y Yang (Cont'd)

Controlling secondary fermentation in wine with vitamin K_5. Wines & Vines. 1956

Vitamin K_5 as a preservative for wine. Food Tech. 1957

Vodka from pear wastes. Food Engineering. Jan, 1958

Preliminary report on the brined cherry project, 1958 season. State Cir 340, St Col of Wash. 1958

Vitamin K_5 as a food preservative. Food Tech. 1958

Removal of excessive anthocyanin pigment by enzyme. Food Tech. 1958

Breakdown of sweet cherries during brining. 50th An Report, Ore St Hort Soc. Nov, 1958

Suggestions for cherry brining. Cir of Inf 597, OAES. April, 1959

Oregon grapes for Oregon wines. Cir of Inf 598, OAES. Sept, 1959

T Onsdorff

Graduate Specialization: Frozen Foods, Food Plant Equipment

Membership: Institute of Food Technologists

Publications: Passion Fruit culture in Hawaii. Ext Cir 345 revised U of Hawaii. Feb, 1956

A smokehouse for the sportsman and hobbyist. Ext Bul 788, Sept, 1959

C J Wilder

Graduate Specialization: Food Technology, Bacteriology

Memberships: Inst Food Tech, Soc Am Bacteriologists, OSEA, SX, West Br Am Public Health Assn

Publications: Survey of the use of processing water in canneries and freezing plants in the Willamette Valley, Oregon. Misc paper #5, OAES

Mandatory standards program on quality factors for frozen asparagus and peas - an industry approach. II. Selection of official analytical procedures. Food Tech. October, 1954

Food processing wastes utilization and disposal. Proc 7th An Pac NW Inds Waste Conf, St Col of Wn. 1956

A micro-method and apparatus for the determination of rates of destruction of bacterial spores subjected to heat and bactericidal agents. Food Research. 1957

O J Worthington

Graduate Specialization: Biochemistry, Education, Genetics, Organic Chemistry, Animal Nutrition

Memberships: Inst of Food Tech, Am Chem Soc, Am Assn for Advancement of Science, Am Soc for Quality Control, Ore Academy of Science, Natl Science Teachers Assn, AAUP

Publications: Comparison of several methods and instruments for specifying the color of frozen strawberries. Food Tech. 1954

Expression of oil from dried fish meal.

Color differences in the quality evaluation of fruits and vegetables "Color in Foods - A Symposium". Natl Res Council, Quartermaster Food and Container Inst. 1954

The use of fresh fruit objective tests to predict the quality of canned italian prunes. Food Tech. 1955

Aspuntes Sobre la Tecnologia de Olinentos. Instituto Politecnico Nacional. Mexico City. 1956

Measurement of quality factors of canned purple plums. Ore State Hort Soc, 49th An Report. 1957

The nature of the flavor of filbert nuts. I. Organoleptic examination and quantitative estimation. Food Research

E W Harvey

Graduate Specialization: Food Technology, Bacteriology, Physiology

Memberships: Inst Food Tech, Food & Container Inst, Pac Fisheries Tech, Sigma Xi

Publications: Competitive quality begins on the boat. Part I. Good handling helps to keep competitive. Part II. Reprinted by Alaskan Dept of Labor. June, 1954

An expandable food resource - Oregon seafoods, or board to promote development of Oregon fisheries urged. U of O. 1954

More fish for cans. Canco, Am Can Co. May, 1954

He'll eat anything that swims. Sat Evening Post. Dec 4, 1954

Bigger profits from quality fish. Reprinted by OSC from 1st publ above. Oct 19, 1956

Savory seafoods search. Ore Seafoods Producers Board. 1956

Savory seafoods of Ore. Ore Seafoods Producers Bd. 1957

Savory seafood of Ore. Ore Seafoods Producers Bd. 1958

What can be done to help Ore fisheries? Grow with Oregon. July, 1959

Some answers to the NW fish problems. Grow with Ore. 1959 July

J H Dietz

Graduate Specialization: Food Technology, Bacteriology, Public Health, Dairy Technology

Memberships: Am Chem Soc, AIBS, ASHS, Inst Food Tech, SX, AZ, PKP, PTS

Publication: A study of group acceptance of baked sweet potatoes. Proc ASHS. 1959

E A Day

Graduate Specialization: Dairy Science, Biochemistry, Bacteriology

Memberships: Am Dairy Sci Assn, Am Chem Soc, Am Oil Chem Soc, SX, PKP, AZ, Gamma Sigma Delta, Omicron Delta Kappa

Publications: A test for the keeping quality of pasteurized milk. J Milk and Food Tech. 1956

Methyl sulfide and the flavor of milk. J Dairy Sc. 1956

Flavor and odor defects of gamma-irradiated skimmilk. I. Preliminary observations and the role of volatile carbonyl compounds. J Dairy Sci. 1957

Flavor and odor defects of gamma-irradiated skimmilk. II. Identification of volatile components by gas chromatography and mass spectrometry. J Dairy Sci. 1957

Probable role of the Strecker degradation of amino acids in development of cheese flavor. J Dairy Sci. 1957

The role of methional as a flavor compound. Food Res. 1958

Manufacture of improved quality sherbets. Ice Cream Field. 1959

Paper chromatography of 2,4-dinitrophenysulfide derivatives of mercaptans and mercapto-acids. Microchemical Jour. 1959

Lois A Sather

Memberships: SX, Inst Food Tech, Am Home Economists Assn

Publications: Effect of insecticides on vegetable flavor. Ore Veg Digest. July, 1954

Frozen strawberry sundae topping. Food Proc Review. Apr 18, 1958

Relation of laboratory measurements of fresh beef quality to consumer preference obtained from a survey using three-dimensional color pictures. OAES. 1958

Flavor testing techniques for the frozen food packer. Frosted Food Field. June, 1958

Building convenience into green beans. Food Proc Review. June 10, 1958

Lois A Sather (Cont'd)

Performance data and flavor evaluation of broilers fed diets containing varying amounts of animal fat. Poultry Science, July, 1958

A comparison of an objective and subjective measurement of beef tenderness. Food Tech. 1958

Laboratory flavor panels. OAES. 1958

Lois A Sather (Cont'd)

The influence of added monosodium glutamate on the flavor of processed green beans. Food Tech. 1958

Flavor studies of ice cream vs ice milk by student taste panels. Ice Cream Field. 1958

Acceptability of fresh and precooked radiated meats. Food Research. 1958

A comparison of student preference panels with a household consumer panel. OAES. 1958

A F Anglemier

Graduate Specialization: Animal Nutrition, Physiology

Memberships: SX, Phi Sigma, PKP, AAAS, Inst Food Tech, Am Soc An Prod

Publications: Responses to aureomycin supplementation by lambs under different feeding conditions. West Sec Am Soc An Prod. 1955

Feeding of various levels of Calif sardine oil to swine. Proc West Sec Am Soc An Prod. 1956

Feeding of various levels of pilchard (Calif sardine) oil to swine. J An Sci. 1957

Feeding of crude and modified Menhaden oils in rations for swine. Jr An Sci. 1957

Feeding fish oils to domestic animals. Comm Fisheries Review. 1957

Relation of beef grades to consumer preference as obtained from a survey using three-dimensional color pictures. Proc West Sec Am Soc An Prod. 1958

A comparison of an objective and subjective measurement of beef tenderness. Food Tech, 1958

Acceptability of fresh and precooked radiated meats. Food Research. 1958

J O Young

Graduate Specialization: Chemistry,(specifically milk protein chemistry)

Memberships: Am Dairy Sci Assn, Am Chem Soc, Inst Food Tech, Int Assn of Milk and Food Sanitarians, SX, AZ

Publication: Calculation of solids - not - fat by formulas. Proc 35th An Mtg, West Div ADSA. 1954

D K Law

Memberships: SX, Phi Sigma, Pac Fish Tech, NW Fish Culturists

Publications: 3rd Prog Report on Spring Chinook salmon diet experiments. Fish Comm Research Briefs. 1954

D K Law (Cont'd)

4th Prog Report on salmon diet experiments. Fish Comm Research Briefs. 1955

5th Prog Report on salmon diet experiments. Fish Comm Research Briefs. 1955

Marion Forks 4th nutritional experiment. Fish Comm of Ore coop OAES, Seafoods Lab. 1957

Development of the Ore pellet diet. OAES. 1959. In press

W A Sistrunk

Graduate Specialization: Food and Dairy Technology, Bacteriology, Horticulture

Memberships: Inst Food Tech, Am Soc for Hort Sci, Ore St Hort Soc, SX, Phi Sigma, PKP

Publications: Sweet potato chips. Food Engr. 1954

Suitability of Southern grown potato varieties for processing. Am Potato Hour. 1954

Carbohydrate changes during storage and cooking of sweet potatoes. Food Tech. 1954

Chemically controlled peach maturity - A preliminary report. Assoc Southern Agr Workers. 1954

Seed sources in relation to Irish potato production in Louisiana. Assoc Southern Agr Workers. 1954

Suitability of Louisiana okra for processing. Assoc Southern Agri Workers. 1955

Irrigation studies of sweet potatoes. Assoc Southern Agr Workers. 1955

Prepeeled packaged sweet potatoes. Assoc Southern Agr Workers. 1955

Response of Southern grown potatoes to maleic hydrazide. Assoc Southern Agr Workers. 1955

Effects of antibiotics on potato seed pieces. Assoc Southern Agr Workers, 1955

Effects of conditions of storage of raw materials on chemical properties of dehydrated products. Agr & Food Chem. 1955

Blue Lake pole, bush bean quality compared. Ore Veg Digest. 1957

Some processing characteristics of the newer varieties of peaches and cherries. Ore St Hort Soc Proc. 1957

Problems involved in the prepeeling and packaging of sweet potatoes. Food Tech. 1957

Headliner, a new strawberry variety. Assoc Southern Agr Workers. 1958

Sweet potato storage: Variety X temperature. Assoc Southern Agr Workers. 1958

Relation of certain field factors to the color of Blue Lake pole green beans for processing. Ore Veg Digest. 1958

W A Sistrunk (Cont'd)

Further evaluation of cherry varieties by canning and brining. Ore State Hort Soc Proc. 1958

Mechanical harvest of bush beans varieties. Ore Veg Digest. 1958

Transfer of certain Blue Lake pole bean pod characters to bush beans. Am Soc Hort Sc. Proc. 1958

Evaluations of sweet cherry varieties and selections in Oregon. Fruit Varieties and Hort Digest. 1959

Sweet cherries for Oregon. OAES bul 570. 1959

Teh Chu Yu

Graduate Specialization: Fish Technology, Fat Autoxidation, Radiation Preservation of Fishery Products, Fish Hatchery Nutrition

Memberships: Pacific Fisheries Technologist, SX

Publications: 3rd Prog Report on spring Chinook salmon diet experiments. Fish Comm Research Briefs. 1954

Stimulatory effect of calcium on growth of Lactobacillus fermenti. Proc Soc Exp Biol & Med. 1955

Report on total solids and ether extracts in fish and other marine products. Assoc of Official Agr Chemists. 1956

Variation of proximate composition of right and left fillets of rockfish (Sebastodes Pinniger) and dover sole (Microstomas Pacificus). Comm Fisheries. 1956

2-Thiobarbituric acid method for the measurement of rancidity in fishery products. Food Tech. 1957

2-Thiobarbituric acid method for the measurement of rancidity of fishery products. II. The quantitative determination of malonaldehyde. Food Tech, 1958

Characterization of the red pigment formed in 2-thiobarbituric acid determination of oxidative rancidity[a, b]. Food Research. 1958

INSTRUCTIONAL STAFF

Department: Horticulture

Faculty Member	Nature of Appointment	Tenure	Years of Service (OSC)	Years of Teaching or Professional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institutions	Graduate Work Beyond Highest Degree Held
S B Apple, Jr	Prof 12 mo	I	9	22	.45	.45	.10[1]	BS Tex A&M MS Tex A&M PhD WSC	
E Hansen	Prof 12 mo	I	24	24	.15	.80	.05[1]	BS OSC MS OSC PhD Chic	
W A Frazier	Prof 12 mo	I	10	26	.25	.65	.10[1]	BS Tex A&M MS Tex A&M PhD Md	
A N Roberts	Prof 12 mo	I	19	19	.35	.43	.22[2]	BS OSC MS OSC PhD Mich St	
O C Compton	Assoc Pr 12 mo	I	11	27	.15	.85		BS Calif MS Calif PhD Cornell	9 cr hrs
S Wadsworth	Assoc Pr 12 mo	I	13	23	.75	.20	.05[1]	BS Cornell	28 cr hrs
Q B Zielinski	Assoc Pr 12 mo	I	12	17	.30	.70		BS OSC MS Ohio St PhD Va	
L T Blaney	Assoc Pr 12 mo	I	10	11	.40	.60		BS Penn St MS Penn St PhD Calif LA	
H J Mack	Asst Pr 12 mo	I	4	5	.15	.85		BS Tex A&M MS Tex A&M PhD OSC	

R Garren, Jr	Asst Pr 12 mo	I	7	7	.15	.85		BS OSC MS OSC	Req for PhD comp except thesis
J R Baggett	Asst Pr 12 mo	I	3	3	.05	.95		BS Ida PhD OSC	
G Crabtree	Asst Pr 12 mo	Y	2	2	.15	.85		BS OSC MS Cornell PhD Cornell	
H B Lagerstedt	Instr 12 mo	Y	2	3	.70	.30		BS OSC MS OSC	4 cr hrs
E A Cline	Instr 12 mo	Y	2	2	.10	.15	.50[3]	BS OSC	24 cr hrs
USDA Personnel									
J H Painter	Hort 12 mo	I	11	34			1.00	MS OSC	
G F Waldo	Hort 12 mo	I	27	33			1.00	MS MSU	15 cr hrs

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[1] Ag Tech Adv
[2] .10 Ag Tech Adv, .12 N Will Br Sta
[3] Farm Maint

INSTRUCTIONAL STAFF

Department: Horticulture

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

S B Apple, Jr.

Graduate Specialization: Horticulture, Plant Physiology, Soils

Memberships: ASHS, Sigma Xi, AAUP, AIBS

Publications: Ore St Hort Soc Proc 46. 1954
Ore Veg Digest. 1954. 3(1):5-6
Ore Veg Digest. 1954. 3(2):7-8
Ore Veg Digest. 1954. 3(3):6,7-8.
Pl Physiol. In press. Co-author.

E Hansen

Graduate Specialization: Horticulture, Post Harvest Physiology

Memberships: SX, Phi Kappa Phi, Alpha Zeta, Phi Sigma, Phi Tau Sigma,
ASHS, ASPP, AAUP, AAAS (Fellow)

Publications: ASHS Proc. 66:118-124. 1955
Nature 179:48-49. 1957 (co-author)
ASHS Proc. 69:110-115. 1957
Ore St Hort Soc Proc. 50:11-12. 1958
Conf Transp Perish (U of C). 1958

W A Frazier

Graduate Specialization: Horticulture (Vegetable Crops)

Memberships: AAAS, ASHS, AIBS, SX, PKP

Publications: Ore Veg Digest 4(1):3-4. 1955
Ore Veg Digest 4(2):1-3. 1955
Ore Veg Digest 4(3):1-2. 1955
Ore Veg Digest 5(1):6&7. 1956
Ore Veg Digest 5(2):4. 1956
Ore Veg Digest 5(2):5. 1956
Ore Veg Digest 3(4):5. 1954
Ore St Hort Soc Proc. 46:137-141. 1954
ASHS Proc. 71:416-421. 1958. (co-author)
Ore St Hort Soc Proc. 50:155-157. 1958. (co-author)
Ore Veg Digest 8(4):1-4. 1959. (co-author)
ASHS Proc. 70:325-333. 1957. (co-author)

W A Frazier (Cont'd)

Ore Veg Digest 7(3):5-6. 1958
Ore Veg Digest 7(4):1-2. 1958. (co-author)
Plt Dis Reporter. 43:137-143. 1959. (co-author)
Ore St Hort Soc Proc. 49:129-130. 1957
OAES Bul 526. 1957. (co-author)
Ore Veg Digest 7(1):1,6. 1958
Ore Veg Digest 6(1):5. 1957
Ore Veg Digest 6(2):1-4. 1957
Ore Veg Digest 6(3):8. 1957
ASHS Proc. 69:400-404. 1957. (co-author)
Ore Veg Digest 6(4):5 & 6. 1957. (co-author)

A N Roberts

Graduate Specialization: Horticulture, Soils, Botany

Memberships: ASHS, SX, Pl Prop Soc, SSSA

Publications: Ore St Hort Soc Proc 48:156-161. 1956
Ore Agr Progress 4(1). 1956
Phytopath 44(10):601-603. 1954. (co-author)
OAES Cir of Info 578. 1957. (co-author)
Ore Orn & Nurs Digest 2(2). 1958
Ore Orn & Nurs Digest 2(3). 1958
OAES Tech Bul 50. 1959. (co-author)
Wash St Hort Assn Proc. 53:202-206. 1957
Ore St Hort Soc Proc. 46:33-39. 1954. (co-author)
ASHS Proc. 68:522-536. 1956. (co-author)
ASHS Proc. 68:157-168. 1956. (co-author)
Jour Am Hort Soc. :155-167. 1957
1959 Am Rose Annual: 62-67
Florists Rev. 117(3019):60. 1955. (co-author)
OAES Misc paper 12. 1955. (co-author)
Ore Orn & Nurs Digest. 3(1). 1959
Handbook of Bulb Gr. & Forc. 35-42. 1957. (co-author)

O C Compton

Graduate Specialization: Horticulture, Plant Nutrition

Memberships: AZ, SX, ASHS, AIBS, ASPP, SSSA, AAUP

Publications: WSC & OSC Misc. paper 15. 1955. (co-author)
West Fr Grower. Oct, 1957
ASHS Proc. In press. (co-author)
ASHS Proc. In press.

S Wadsworth

Graduate Specialization: Floriculture

Memberships: AX, Pi Alpha Xi, PKP, Soc Am Florist, NW Florist Assn, Ore Fl Gr Assn

Publications: Ore Orn & Nurs Digest. 1(1):1,6. 1957
Pac Northwest Bul 32, 1959. (co-author)

Q B Zielinski

Graduate Specialization: Genetics

Memberships: SX, AZ, ASHS, Sigma Delta Chi, Mu Beta Beta, Delta Sigma Rho, Bot Soc Am, Genetics Soc Am, AAAS, Am Pomol Soc

Publications: OAES Bul 563. 1957
OAES Bul 570. 1959. (co-author)
ASHS Proc. 72:123-128. 1958
ASHS Proc. 70:113-118. 1957. (co-author)
Bot Gaz. 117(2):166-172. 1955
Mod Syst Pomology (text). W C Brown Co. 1955
Ore St Hort Soc Proc. 48:1-5. 1956
Ore St Hort Soc Proc. 46:75-80. 1954. (co-author)
Ore St Hort Soc Proc. 46:107-114. 1954
OAES Misc publ. 1955
HEPP Proc. 15. July, 1954
Ore St Hort Soc Proc. 48:125-128. 1956
Ore St Hort Soc Proc. 48:215-216. 1956
Ore St Hort Soc Proc. 49:56-59. 1957. (co-author)
Ore St Hort Soc Proc. 48:121-122. 1956. (co-author)
Ore St Hort Soc Proc. 50:33-38. 1958.
Ore St Hort Soc Proc. 47:45-46. 1955. (co-author)
Ore St Hort Soc Proc. 47:105-108. 1955. (co-author)
Good Fruit Grower. June, 1958
Am Fruit Grower. Oct, 1958
OAES Cir 586. 1958. (co-author)
Fr Var & Hort Digest Proc. 12(1):10-11. 1958
Fr Var & Hort Digest Proc. 11(3):39-42. 1957
Fr Var & Hort Digest Proc. 13:34-35. 1959
OAES Cir of Info 550. 1955. (co-author)
OAES Cir of Info 420. 1956
OAES Cir of Info 536. 1954. (co-author)
West Wash Hort Ass Proc. 1955. 75-81.

L T Blaney

Graduate Specialization: Horticulture and Plant Physiology

Memberships: ASHS, SX, AIBS, Pi Alpha Xi, GSD, ASPP, Scand Soc Pl Phys

L T Blaney (Cont'd)

Publications: Florists Rev. 117(3019):60. 1955. (co-author)
Ore Veg Digest 5(3):4. 1956
Bot Gaz. 119:10-24. 1957. (co-author)
Ore Orn & Nurs Dig. 1(1):5. 1957
Ore Orn & Nurs Dig. 1(2):2-3. 1957
Ore Orn & Nurs Dig. 1(3):5. 1957
Ore Orn & Nurs Dig. 1(3):7-8. 1957
Ore St Hort Soc Proc. 49:155-158. 1957
Handbook of Bulb Gr & Forcing: 35-42. 1957. (co-author)
Ore Orn & Nurs Dig. 2(3):1-2. 1958
Ore Orn & Nurs Dig. 2(3):1-3. 1958. (co-author)
ASHS Proc. In press. 1959

H J Mack

Graduate Specialization: Horticulture, Plant Physiology, Soils

Memberships: ASHS, AIBS, Phi Kappa Phi

Publications: Ore Veg Digest 3(2). 1954
Ore Veg Digest 5(1). 1956
Ore Veg Digest 5(3). 1956
Ore Veg Digest 5(4). 1956
Ore Veg Digest 6(1). 1957
Ore Veg Digest 6(2). 1957
Ore Veg Digest 6(4). 1958
Ore Veg Digest 7(1). 1958
Ore Veg Digest 7(4). 1958
Ore Veg Digest 8(1). 1959
Ore Veg Digest 8(3). 1959
ASHS Proc. 74. In press. 1959. (co-author)
Ore St Hort Soc Proc. 48:177-180. 1956
Ore St Hort Soc Proc. 49:165-166. 1957
Ore St Hort Soc Proc. 50:149. 1958

R Garren, Jr.

Graduate Specialization: Plant Physiology & Nutrition, Horticulture

Memberships: ASHS, AIBS, HEPP, AZ, SX

Publications: Ore St Hort Soc Proc. 46:75-80. 1954. (co-author)
Ore St Hort Soc Proc. 47:45-46. 1955. (co-author)
Ore St Hort Soc Proc. 47:105-108. 1955. (co-author)
ASHS Proc. 70:113-118. 1957. (co-author)
Ore St Hort Soc Proc. 48:121-122. 1956. (co-author)
ASHS Proc. 63:182-188. 1954. (co-author)
Western Wash. Hort Assoc Proc. 46. 1956

J R Baggett

Graduate Specialization: Vegetable Breeding, Genetics, Plant Pathology

Memberships: ASHS, Am Phytopath Soc, Sigma Xi, AIBS

Publications: Pl Dis Reporter. 40:702-707. 1956
Phytopath. 47:365-368. 1957
ASHS Proc. 70:325-333. 1957. (co-author)
ASHS Proc. 71:416-421. 1958. (co-author)
Pl Dis Reporter. 43:137-143. 1959

G Crabtree

Graduate Specialization: Vegetable Crops, Plant Physiology

Memberships: Sigma Xi, Phi Sigma

Publications: Proc NE Weed Contr Conf. 9:141-149. 1955. (co-author)
Proc NE Weed Contr Conf. 9:195-199. 1955. (co-author)
Proc NE Weed Contr Conf. 10:182-187. 1956. (co-author)
Proc NE Weed Contr Conf. 10:256-259. 1956. (co-author)
Proc NE Weed Contr Conf. 12:17-24. 1958. (co-author)
Proc NE Weed Contr Conf. 12:25-32. 1958. (co-author)
Proc NE Weed Contr Conf. 12:33-40. 1958. (co-author)
Ore Veg Digest 8(4):1, 5. 1959
Ore St Hort Soc Proc. 50:13-15. 1958
Ore St Hort Soc Proc. 50:158-160. 1958
Ore Veg Digest. 7(4):3. 1958

H B Lagerstedt

Graduate Specialization: General Science, Science Education

Membership: ASHS

Publications: Ore St Hort Soc Proc. 49:122-127. 1959
OAES Cir of Inf 598. 1959

E A Cline

Graduate Specialization: Horticulture, Genetics

H Hartman

Graduate Specialization: Pomology

Membership: ASHS

Publications: OAES Tech Bul 41. 1957
Ore St Hort Soc Proc. 46:33-39. 1954. (co-author)
Ore St Hort Soc Proc. 48:6-12. 1946

J H Painter

Graduate Specialization: Horticulture

Memberships: Phi Kappa Phi, Gamma Sigma Delta, Sigma Xi

Publications: Proc Nut Gr Soc. 208-210. 1954
Proc Nut Gr Soc. 191-194. 1954
Proc Nut Gr Soc. 187-190. 1954
Proc Nut Gr Soc. 207-209. 1955
Proc Nut Gr Soc. 223-229. 1956
Proc Nut Gr Soc. 193-199. 1957
Proc Nut Gr Soc. 1-8. 1958
Proc Nut Gr Soc. 49-56. 1958

G F Waldo

Graduate Specialization: Plant Physiology, Plant Anatomy

Membership: Am Pomological Soc

Publications: Ore St Hort Soc Proc. 46:55-57. 1954
Ore St Hort Soc Proc. 47:39-41. 1955
Ore St Hort Soc Proc. 48:79-81. 1956
Ore St Hort Soc Proc. 49:81-86. 1957
Ore St Hort Soc Proc. 49:87-88. 1957
Ore St Hort Soc Proc. 50:107-114. 1958
Ore St Ext Bul 750. 1955. (co-author)
OAES Cir of Inf 555. 1956
Fr Var & Hort Digest. 13:28-30. 1958
West Wash Hort Assoc Proc. 46:45-50. 1956
OAES Cir of Inf 571. 1957
Ore St Ext Bul 748. 1957. (co-author)
Ore St Ext Bul 777. 1958. (co-author)

INSTRUCTIONAL STAFF

Department: Poultry Husbandry

Faculty Member	Nature of Appointment	Tenure	Years of Service (OSC)	Years of Teaching or Professional Experience	RI	Exp Sta	Other	Degrees Held and Granting Institutions	Graduate Work Beyond Highest Degree Held
J E Parker	Prof 12 mo	I	13	22	.35	.45	.20[1]	BS U Tenn AM U Mo PhD U Mo	
P E Bernier	Prof 12 mo	I	12	27	.27	.70	.03[1]	BSA Laval U PhD U Cal	
J A Harper	Prof 12 mo	I	17	19	.10	.85	.05[1]	BS OSC MS Pa St	
G H Arscott	Asst Pr 12 mo	I	6	6	.20	.75	.05[1]	BS OSC MS U Md PhD U Md	
W H McCluskey	Asst Pr 12 mo	I	4	11	.20	.80		BS Okla St MS OSC	
N L Bennion	Prof 12 mo	I	22	30			1.00[2]	BS Utah St MS Kans St	

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[1] Ag Tech Adv

[2] Extension

INSTRUCTIONAL STAFF

Department: Poultry Husbandry

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

J E Parker

Graduate Specialization: Physiology of Growth and Reproduction

Memberships: Poultry Science Assn, Am Poultry Assn, Sigma Xi, Alpha Zeta, Gamma Sigma Delta, Gamma Alpha

Publications: Feeding in open houses. Poultry Digest. 13:502-503.

Poultry Research at OSC. Eggsaminer. 32(2):18-21.

Questions and answers on artificial insemination of turkeys. Cir Inf 543.

Rigid post brooder house. Co-author H R Sinnard. Pacific Poultryman. 62(2):14, 61-63

Some factors affecting fertility and hatchability of chicken eggs. Eggsaminer. 32(12):4, 5, 26-27.

Test tube poults now practical. Co-author J A Harper. Norbest Turkey News. 19(8):7.

Comment prodiure de meilleaus oeufa-pour l'incubation. Cocoricos Dumond. 8(3):10-11.

Poultry research at Oregon Station. Co-op Chick News. 27(2):6-7.

Rate of comb growth in New Hampshire cockerels as related to their subsequent reproductive performance in flock matings. Poultry Science. 35:1030-1033.

Producing better hatching eggs. Coop Poultryman.19(12):6-8.

Experiments on some management aspects of feeding layers and chicks. Co-authors W H McCluskey, L E Johnson. Proc Ore An Ind Conf. 14:44-46.

Relation of male to female ratios on fertility of cross mated flocks of chickens. Poultry Science. 37:644-648.

Seasonal differences in fertility of eggs from New Hampshire flocks mated to cocks and cockerels. Poultry Sci. 37:822-824.

Les différences saisonnières concernant la fécondite des oefs provenant de troupeaux de New-Hampshire accouplés à des coqs et coquellets. Le Courrier Avicole. 15:8.

Facteurs affectant la fertilité et l'eclosion. Cocoricos Dumonde. 12(2):15-16, 44.

What causes soft shell eggs? Pacific Poultryman. 65(2): 17, 26-28. Reprinted in: Poultry Tribune, SE Ed. 65(2):17, 26,28, 30. Poultry (Australia). Aug 8, 1959:9.

Porqué pierde su dureza la cáscara de los huevos. Industria Avicola. 1(10:16, 27-29. (Oct 1959).

Volume and fertilizing capacity of semen collected from cockerels maintained in cages and on litter on floors. Co-author W H McCluskey. Poultry Science. 38:858-860.

J E Parker (Cont'd)

The use of barley in high-efficiency broiler rations. I. The influence of methionine, grit and stabilized animal fat on efficiency of utilization. Co-authors G H Arscott, L E Johnson. Poultry Science. 34:655-662.

Oregon pole frame house. Co-author M G Cropsey. Pacific Poultryman. 58(10):6-7, 24.

The use of barley in high-efficiency broiler rations. II. Effect of stabilized animal fat and pelleting on efficiency of feed utilization and water consumption. Co-authors G H Arscott, W H McCluskey. Poultry Science. 37:117-123.

Changes in seasonal egg production of turkeys induced through controlled light exposure and force molting. Co-author J A Harper. Poultry Science. 36:967-973.

Effect of restricted light and hormones on subsequent egg production of winter hatched turkeys. Co-author J A Harper. Poultry Science. in press.

P E Bernier

Graduate Specialization: Genetics

Memberships: Genetics Soc of Am, Biometric Soc, World's Poultry Sci Assn, AAAS, AAUP, Sigma Xi, Phi Sigma, Phi Kappa Phi

Publications: Short cuts in poultry breeding. Ore Feed & Seed Dealers Assn. Proc 12th An Ore An Ind Conf. Feb 4-5, 1954

Black down colour and riboflavin requirements in embryos of the domestic fowl. Proc of 10th World's Poultry Congress. 1954

Heart girth as a measurement of conformation in Cornish fryers. Poultry Science. September, 1955

How and when to measure shell strength. Eggsaminer. Jan, 1955

Leukosis in chickens. Co-author E M Dickinson. Eggsaminer. May, 1955

Heterosis for egg production and related economic characters. Proc 8th Pacific Chicken and Turkey Breeders Roundtable. Sept 9,10, 1955

Force-molting--old and new methods. Eggsaminer. Jan, 1956

More life for heavy layers. Ore Ag Progress. Summer, 1956

Genetic and environment correlations. A. Egg number, egg size and egg shape. Proc 10th Pacific Chicken and Turkey Breeders Roundtable. Sept 6,7, 1957

Amélioration de la résistance des pondeuses à la maladie par la sélection génétique. Courrier Avicole. Juin, 1957

La couvaison est-elle un défaut? Cocoricos et aviculture. Décembre, 1957.

The role of future experiment station research in poultry breeding. Proc 11th Pacific Chicken and Turkey Breeders Roundtable. September, 1958

J A Harper

Graduate Specialization: Poultry Husbandry, Zoology

Memberships: Phi Kappa Phi, SX, Gamma Sigma Delta, AZ, Poultry Sci Assn

Publications: The effect of holding time of turkey semen on fertilizing capacity. Poultry Sci. 1955

Changes in seasonal egg production of turkeys induced through controlled light exposure and force molting. Poultry Sci. 1957. Co-author J E Parker

Effect of restricted light and hormones on subsequent egg production of winter hatched turkeys. Poultry Science. In press. Co-author J E Parker.

You can get hatching eggs the year 'round. Turkey World. 1955

Selection and management of turkey breeding flocks. The Eggsaminer. 1955

New developments in turkey nutrition. Proc 14th An Ore An Ind Conf. Feb 9-10, 1956. Reprinted in Feedstuffs. June 9,1956

Recent developments in turkey feeding experiments at OSC. Proc 17th An Ore An Ind Conf. Jan 29-30, 1959. Reprinted in Feedstuffs May 2, 1959

All about costs and efficiency in hatching egg production. Turkey World. Co-author D C Mumford. 1957

Research takes some mystery out of breeding problems. Turkey World. 1958

It pays to care for hatching eggs. Turkey World. 1959

Replacing corn with barley in turkey rations. OAES Cir of Inf 582. Co-author W G Brown. 1957

Further studies on egg yolk as a source of unidentified growth factors for poults and chicks. Co-authors G H Arscott, J R Schubert, P H Weswig. Poultry Science. 1959

Fertility in turkeys. Proc of 12th Pacific Chicken and Turkey Breeders Roundtable. Sept 11-12, 1959

G H Arscott

Graduate Specialization: Poultry Nutrition

Memberships: Poultry Science Assn, World's Poultry Science Assn, Phi Kappa Phi, Alpha Zeta, AAUP

Publications: Unidentified growth factors required by chicks and poults. 4. Experimental variables which influence the dietary requirements of chicks for these factors. Poultry Science. 1955. Co-author G F Combs.

Effect of vitamin B_{12} and antimetabolites of vitamin B_{12} on chick hatchability. Co-authors M S Shorb, U Boggs. Poultry Science. 1955

G H Arscott (Cont'd)

Symposium on minerals for poultry and livestock. 1. Minerals for poultry. Proc 13th Ore An Ind Conf. 1955

The use of barley in high-efficiency broiler rations. 1. The influence of methionine, grit and stabilized animal fat on efficiency of utilization. Co-authors L E Johnson, J E Parker. Poultry Science. 1955

Barley - An energy supplement in poultry rations. Proc 14th Ore An Ind Conf. 1956

What's new in feeding systems? The Eggsaminer. 1956

Nutrition vs economy in feeding systems. Poultry Digest. 1956

Complexity of a chick growth response to egg yolk, animal fat and fish solubles additions to the diet. Poultry Science. 1956

More on energy and protein. The Eggsaminer. 1956

Use of barley and fat in mash or pellet form in broiler rations. Poultry Science. 1956

Use of corn, barley and wheat with or without fat in broiler rations. Misc paper, OAES. 1957

Fats and pellets in broiler rations. OAES Misc paper. 1957

Multiple nature of chick growth responses to fractions of dried egg yolk. Co-authors P H Weswig, J R Schubert. Poultry Science. 1957

Feeding laying and breeding hens. Co-authors J E Parker, N L Bennion. Ext Bul 744. 1957

Egg yolk as a source of unidentified growth factors. Co-authors J A Harper, J R Schubert, P H Weswig. Poultry Sci. 1957

The use of barley in high-efficiency broiler rations. 3. Effect of pellets and reground pellets on growth and efficiency of feed utilization. Co-authors V L Hulit, R K Pautz. Poultry Science. 1957

Barley in poultry rations. Feedstuffs. 1958

OSC Poultry nutrition research. Proc 16th An Ore An Ind Conf. Feb 6-7. pp. 38-43

Egg yolks aid researchers in study of unidentified nutrients. The Eggsaminer. 1958

The use of barley in high-efficiency broiler rations. 2. Effect of stabilized animal fat and pelleting on efficiency of feed, utilization and water consumption. Co-authors W H McCluskey, J E Parker. Poultry Science. 1958

Performance data and flavor evaluation of broilers fed diets containing varying amounts of animal fat. Co-author L A Sather. Poultry Science. 1958

Further studies on egg yolk as a source of unidentified growth factors for poults and chicks. Co-authors J A Harper, J R Schubert, P H Weswig. Poultry Science. 1959

Use of soybean meal, fish meal, and meat and bone meal as protein supplements in broiler rations. OAES Misc paper 69. 1959

Which are best grains for poultry? Oregon Farmer. 1959

G H Arscott (Cont'd)

Utilization of energy supplements by poultry. Proc 12th Calif An Ind Conf. 1959

Residue levels occurring in animal products and tissues when endrin is added to livestock feed. Co-authors L C Terriere, D C England, Ulo Kiigemagi, R G Sprowls. OAES Misc paper. 1956

Substitution value of barley and fat for corn in broiler rations. Co-author W G Brown. OAES Cir of Inf 585. 1957

A method for dealing with time in determining optimum factor inputs. Co-author W G Brown. Journal of Farm Economics. 1958.

The endrin content of eggs and body tissue of poultry receiving endrin in their daily diet. Co-authors L C Terriere, Ulo Kiigemagi. Reprint from Ag and Food Chem. 1959

W H McCluskey

Graduate Specialization: Agricultural Education, Poultry

Memberships: Phi Kappa Phi, Poultry Science Assn

Publications: Broilers: Their growth and feed requirements. OSC Cir of Inf 566.

Management factors in egg and meat production. Cooperative Poultryman. July, 1956

Maintaining egg quality on the farm. Eggsaminer. April, 1957

Our ideas on culling are changing. Eggsaminer. July, 1957

Modern culling - The Poultry Farmer. Australia. Nov, 1957

Stop, look--evaluate and cull. Poultry Digest. Sept, 1957. Reprinted in Australia. Feb. 1958

Influence of feeder space on chick growth. Poultry Science. July, 1958

Broiler growth facts. Eggsaminer. Nov, 1957

Mash-scratch ratios for meat type hens. Eggsaminer. Dec, 1958

Effect of water space upon chick performance. Poultry Science. May, 1958

Dubbing leghorn pullets. Poultry Science. Jan, 1958

Dubbing. Ore Ag Progress. Winter, 1958

Mash-scratch ratios for meat type birds. Misc Publ 68

Feeder space. Pacific Poultryman. Aug, 1959

Dubbing leghorn pullets. Pacific Poultryman. Sept, 1959

Determinacion de requisito de comeder para pollitos. Industria Avicolo. Oct, 1959

INSTRUCTIONAL STAFF

Department: Soils

Faculty Member	Nature of Appoint-ment	Ten-ure	Years of Service (OSC)	Years of Teaching or Profes-sional Experience	RI	Exp Sta	Ag Tech Adv	Degrees Held and Granting Institu-tions	Graduate Work Beyond Highest Degree Held
H B Cheney	Prof 12 mo	I	7	24	.46	.44	.10	BS Iowa St PhD Ohio St	
G A Johnsgard	Prof 12 mo	Y		17	.75	.25		BS ND Ag C MS Mich St PhD Cornell	2/3 yr army in san engr
C T Youngberg	Prof 12 mo	I	6	12	.35	.65		BS Wheaton MS Mich PhD Wisc	
D D Evans	Assoc Pr 12 mo	I	6	10	.45	.55		BS Ohio St MS Iowa St PhD Iowa St	
T L Jackson	Assoc Pr 12 mo	I	7	8	.25	.70		BS Wash St MS Wash St PhD Wash St	
E G Knox	Assoc Pr 12 mo	I	5	7	.43	.57		BS Ill MS Ill PhD Cornell	
M E Harward	Assoc Pr 12 mo	I	4	11	.40	.60		BS Brig Y MS Mass PhD No Car	
L A Alban	Asst Pr 12 mo	I	7	10	.20	.70	.10	BS Wash MS Wash PhD OSC	
G L Ashcroft	Instr 12 mo	Y	2	3	.19	.51		BS Utah St MS Utah St	3 yr
R A Cattani	T Asst 12 mo	Y	2	3	.25	.25		BS Brig Y	45 hrs

INSTRUCTIONAL STAFF

Department: Soils

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

H B Cheney

Graduate Specialization: Soil Fertility

Memberships: ASAA, WSSC, SSSA, SCSA, Northwest Science Assn, AAUP, OSEA, Delta Zeta, Phi Kappa Phi, Gamma Sigma Delta, Epsilon Sigma Phi, Int Soc Soil Science, AAAS

Publications: Soil fertility research in Oregon. PNWF Conf. 1954

Potassium supplying power of some western Oregon soils. Co-author A Pope. PNWF Conf. 1956

Forms of nitrogen and their behaviour in the soil. PNWF Conf. 1956

Lime and the inter-relationships of lime and fertilizer. PNWF Conf. 1957

Interactions - their meaning and significance. PNWF Conf. 1959

Potassium supplying power of several western Oregon soils. Tech paper 931. Soil Sci Soc Am Proc. 1955

Field crop management in pacific northwest. Co-authors Foote, Knox, Rampton. Misc paper 22. 1955

Adjustments in agriculture - a challenge to agronomy. II. Implications to resident instruction. 1959

Soils. The north pacific valleys. Yearbook of Ag. 1957

G A Johnsgard

Graduate Specialization: Soil Genesis, Morphology & Classification, Soil Physics & Chemistry, Geology & Economics

Memberships: Alpha Zeta, Phi Kappa Phi, Sigma Xi

C T Youngberg

Graduate Specialization: Forestry, Soils

Memberships: Am Soc Agronomy, SSSA, Soc Am Foresters

Publications: Fertility standards for raising Douglas fir in forest nurseries. Co-author R C Austin. Jour Forestry. 1954

Effect of soils on the establishment of tree crops. SSSA Proc. 1955

Some site factors affecting the success of reforestation and afforestation activities in the Willamette Valley foothills. SSSA Proc. 1955

C T Youngberg (Cont'd)

The effect of certain site and soil factors on the establishment of Douglas fir on the Tillamook Burn. Co-author G L Lowry. SSSA Proc. 1955

The effect of logging and slash burning on soil structure. Co-author C T Dyrness. SSSA Proc. 1957

A modification of the hydrometer method of mechanical analysis for certain western forest soils. SSSA Proc. 1957

The uptake of nutrients by western conifers in forest nurseries. Jour Forestry. 1958

The influence of soil conditions, following tractor logging, on the growth of planted Douglas fir seedlings. SSSA Proc. 1959

The influence of soil moisture on the survival of planted Douglas fir seedlings on clay soils. Jour Forestry. 1959

The influence of soils and topography on the occurrence of lodgepole pine in central Oregon. Co-author C T Dyrness. Northwest Science. 1959

Soil-vegetation relationships in the central Oregon pumice region. Co-author C T Dyrness. Proc 1st North Am Forest Soils Conf. Mich St Univ. In press

D D Evans

Graduate Specialization: Soil Physics

Memberships: ASA, SSSA, Am Geophysical Union, AAUP, Sigma Xi, Gamma Sigma Delta

Publications: Temperature-time curves as soil freezes related to moisture-stress curves. Co-authors J A Harrigan, C E Chinn.

The electric balance technique for measuring the mass and charge of clay particles. Co-author E R Perrier.

Turbidimeter technique for measuring the stability of soil aggregates in a water-glycerol mixture. Co-author J M Davidson.

T L Jackson

Graduate Specialization: Soil Fertility

Memberships: Sigma Xi, Phi Sigma, Western Sec SSSA, ASA

Publications: Molybdenum problem in Oregon. Misc paper 64. 1958

A self-propelled forage plot harvester. Misc paper 28. 1956

Fertilizer response on grains and grass seed crops in the Willamette Valley. 5th An Proc PNWF Conf. 1954

The effect of time and rate of nitrogen application on seed production of common ryegrass. 7th An Proc PNWF Conf. 1956

The need for lime in western Oregon. 8th An Proc PNWF Conf. 1957

T L Jackson (Cont'd)

How much nitrogen does ladino clover contribute to a pasture? Co-author Hugh Gardner. 10th An Proc PNWF Conf. 1959

Interactions affecting production of legumes in western Oregon. 10th An Proc PNWF Conf. 1959

Fertilizing strawberries in the Willamette Valley. Co-author R K Kirsch. Sta Cir Inf 594. 1959

Fertilizing for maximum yields. Hidden Hunger in your Crops. Am Potash Institute. 1958

Ammonia nitrogen loss from sprinkler applications. Co-authors L A Alban, J W Wolfe. Cir Inf 593. 1959

Applying fertilizer through sprinkler systems. Ext Bul 774. 1958

Economics of growing malting barley. Co-authors W G Brown, W H Foote. Plant Food Review, National Plant Food Institute.

How to take a soil sample ... and why. Ext Cir 628. 1957

Improved clover-grass pasture (coast counties) irrigated and dryland pastures. Co-author W S McGuire. Fertilizer Recommendations. No 1. 1958

Subclover pastures (coast counties--nonirrigated). Co-author D W Hedrick. Fertilizer Recommendations. No 2. 1958

Subclover pastures. Douglas-Josephine-Jackson Counties. Co-author D W Hedrick. Fertilizer Recommendations. No 4. 1958

Common ryegrass (seed production--Willamette Valley). Fertilizer Recommendations. No 5. 1958

Chewings fescue (Willamette Valley). Fertilizer Recommendations. No 6. 1958

Bent grass -- (Willamette Valley). OSC Fert Rec 7. 1958

Spring grains -- (Willamette Valley). OSC Fert Rec 8. 1958

Winter wheat (Willamette Valley). OSC Fert Rec 9. 1958

Field corn (Willamette Valley). OSC Fert Rec 10. 1958. Co-author R E Fore

Sweet corn (Willamette Valley). OSC Fert Rec 11. 1958. Co-author H J Mack

Pole beans (Willamette Valley). OSC Fert Rec 12. 1958. Co-author H J Mack

Table beets (Willamette Valley). OSC Fert Rec 13. 1958. Co-author H J Mack

Strawberries (Willamette Valley). OSC Fert Rec 14. 1958. Co-author R K Kirsch

Subclover pastures (Willamette Valley--Nonirrigated). OSC Fert Rec 15. 1958

Perennial grass pastures (Willamette Valley--Nonirrigated). OSC Fert Rec 16. 1958. Co-author D W Hedrick

Red clover and crimson clover (Willamette Valley). OSC Fert Rec 17. 1958

Alfalfa (Willamette Valley). OSC Fert Rec 18. 1958

Irrigated pastures (Willamette Valley). OSC Fert Rec 19. Co-author W S McGuire. 1958

E G Knox

Graduate Specialization: Soil Genesis, Morphology and Classification

Memberships: SSSA, ASA, Int Soc Soil Sci, AAAS, AAUP, Sigma Xi, Phi Sigma

Publications: Distribution and characterization of loess like soil parent material in northwestern Oregon.

Study of soil tests as related to soil series.

Field crop management in Pacific Northwest.

Fragipan horizons in N. Y. soils. 1. General characterization and distribution. 3. The basis of rigidity.

Soils section of Atlas of Pacific Northwest.

Soils section of Atlas of Oregon Agriculture.

M E Harward

Graduate Specialization: Soil Chemistry and Clay Mineralogy

Memberships: ASA, SSSA, Sigma Xi, AAUP

Publications: The occurrence of chlorite and vermiculite in the clay fraction of three British Columbia soils. Co-authors A A Theisen, G R Webster. Canadian Jour of Soil Sci. 1959

Interrelationships among iron, manganese, and molybdenum in the growth and nutrition of tomatoes grown in culture solution. Co-authors R K Kirsch, R G Petersen. Plant and Soil. 1960 (in press)

Hydrogen and calcium ion ratios in dilute equilibrium solutions as related to cation saturation. Co-author G R Webster. In press.

Progress Report on soil studies involving sulfur. Co-authors T T Chao, S C Fang. PNWF Conf. 1959

L A Alban

Graduate Specialization: Soils, Chemistry, Plant Physiology, Farm Crops

Memberships: Sigma Xi, Alpha Chi Sigma, ASA, SSSA, WSSS, AAUP

Publications: Where we stand in soil testing. PNWF Conf. 1954

Study of soil tests as related to soil series. Tech paper 1168. Proc Soil Sci Soc Am. 1958

Crop response to potash on Oregon soils. Co-author W L Powers. Soil Sci Soc Am Proc. 1948

Two approaches to determination of the fertility status of Malheur County, Oregon, soils. Co-authors A S Hunter, J A Yungen. Soil Sci Soc Am Proc. 1957

Wheat fertilization experiments in the Columbia Basin. Co-authors A S Hunter, ... OAES Cir Inf 570. 1957

L A Alban (Cont'd)

The effect of nitrogen fertilizers on the relationship between increases in yield and protein content of pastry-type wheats. Co-authors A S Hunter, ... Agron Jour. 1958

Soil science Lab Exercises for high school students. Co-author M D Dawson. Ore Agr Sci No 1. November, 1957

A sampling study in a saline and alkali area. Co-authors A H Sayegh, R G Petersen. Soil Sci Soc Am Proc. 1958

Interpretation of soil tests. OAES Cir of Inf 587. March, 1958

Salt-affected soil characteristics in the Baker Valley area. Co-authors A H Sayegh, H E Cushman. OAES Misc paper 63. October, 1958

Effect of lime additions on pH and base saturation of five western Oregon soils. Co-author Clara Lin. Soil Sci. 1958

Methods of soil analysis as used in the OSC soil testing laboratory. OAES Misc paper 65. Co-author Mildred Kellogg. Feb, 1959

Ammonia nitrogen loss from sprinkler application. Co-authors T L Jackson, J W Wolfe. OAES Cir of Inf 593. Jan, 1959

Looking at your soil in a test tube. Proc Ore St Hort Soc. 1957

Looking at your soil in a test tube. Better Crops with Plant Food. Feb, 1958

Correlation of soil tests with yield responses in Oregon. Proc 6th An Fert Conf Pac NW. 1955

Report on nitrogen tests on soils of the Columbia Basin wheat area. Co-authors A S Hunger, C J Gerard, H M Waddoups. Proc 7th An Fert Conf Pac NW. 1956

The effects of fertilizers upon the yield and quality of wheat in the Columbia Basin Dryland Area of Oregon. Co-author A S Hunter. Proc 7th An Fert Conf Pac NW. 1956

Relationship of added lime to pH and base saturation. Proc 8th An Fert Conf Pac NW. 1957

Be sure with a soil test. Ext Cir 648. 1958

A study of extractable soil cobalt in soils of south-eastern United States. Co-author Joe Kabota. Soil Sci Soc Am Proc. In press

G L Ashcroft

Graduate Specialization: Soil Physics

Memberships: ASA, SSSA, Am Geophysical Union, Sigma Xi

R A Cattani

Graduate Specialization: Soil Chemistry

INSTRUCTIONAL STAFF

Department: Veterinary Medicine

Faculty Member	Nature of Appoint- ment	Ten- ure	Years of Service (OSC)	Years of Teaching or Profes- sional Experience	RI	Exp Sta	Ag Tech Adv	Degrees Held and Granting Institu- tions	Graduate Work Beyond Highest Degree Held
E M Dickinson	Prof 12 mo	I	30	30	.38	.47	.15	DVM Ohio SU MS OSC	
J N Shaw	Prof 12 mo	Y	36	36	.50		.10	BS OSC BS WSC DVM WSC	
J F Bone	Assoc Pr 12 mo	I	9	12	.40	.52	.08	BA WSC BS WSC DVM WSC MS OSC	

INSTRUCTIONAL STAFF

Department: Veterinary Medicine

Faculty Member; Graduate Specialization; Membership in Scholarly and Professional Organizations; List of Publications During Past Five Years:

E M Dickinson

Graduate Specialization: Veterinary Pathology

Memberships: Am Vet Med Assn, Ore Vet Med Assn, Poultry Sci Assn, U S Livestock Sanitary Assn, AAAS, World's Poultry Sci Assn, SX, GSD

Publications: Coccidial immunity studies in chickens. II. The dosage of eimeria tanella and time required for immunity to develop in chickens. Co-author W E Babcock. Poul Sci. May, 1954

Respiratory diseases. Eggsaminer. Sept, 1954

Bronchitis in chickens, sinusitis in turkeys. Proc 13th An Ore An Ind Conf. Feb 3-4, 1955

Leukosis in chickens. Co-author Paul E Bernier. Eggsaminer. May, 1955

Erysipelas in turkeys. Co-author A C Jerstad. Ore Ext Bul 756. Aug, 1956

Ornithosis in Oregon turkeys. Co-authors W E Babcock, J G Kilian. Jour AVMA. 1957

Immunization against infectious bronchitis virus. Co-author W E Babcock. Jour AVMA. 1957

Erysipelas in turkeys. Turkey World. May, 1957

Diseases of poultry transmissible to man. Proc 1st Poultrymen's Institute. Oct 23-24, 1958. WSC.

J N Shaw

Graduate Specialization: Veterinary Pathology

Memberships: Am Vet Med Assn, Ore Vet Med Assn (Life Member), Sigma Xi

J F Bone

Graduate Specialization: Veterinary Pathology

Memberships: Am Vet Med Assn, US Livestock Sanitary Assn

Publications: Atrophic rhinitis in swine. No Am Vet. 1955

A practical approach to controlling atrophic rhinitis. Berkshire News. April, 1955

The relation of carotene intake to the carotene and vitamin A values of the plasma, liver, and milk fat of dairy cattle. Am Dairy Sci Assn paper. July, 1955

J F Bone (Cont'd)

Carotene in the ration of dairy cattle I. Jour Dairy Sci. 1956

Carotene in the ration of dairy cattle II. Jour Dairy Sci. 1956

Special management stops hog rhinitis. Ore Ag Prog. 1956

Urogenital anomalies in calf born to beef cow treated with testosterone during pregnancy. Jour Pharm & Exp Therap. 1957

Copper and iron distribution in bovine liver determined from biopsy and slaughter samples. OAES Tech paper 991. 1957

Anthrax. No Am Vet. 1957

El antrax. Boletin Oficina Sanitaria Panamericana. May, 1958

Common pet poisons. Mod Vet Pract. 1958

Carotene and vitamin A content of bovine liver before and after parturition. OAES Tech pub 1062. 1958

Lymphatic edema in a cow. Mod Vet Pract. Feb, 1958

Seasonal diseases. Mod Vet Pract. 1958

Bovine reproductive disorders. Mod Vet Pract. 1958

Animal anatomy. Lithoprint OSC Coop. 1958. 1st ed.

Effect of feeding different sources of carotene and/or vitamin A in bovine blood, liver and milk fat. Tech paper 1159,OAES. 1959

Organization, Meetings and Committees

2. The division of agriculture has followed a pattern of holding meetings with heads of departments to consider questions and problems pertaining largely to administration. These meetings will average about two per month. The Dean and Director or his appropriate assistant presides. Minutes are taken, reproduced and sent out to all departments. A file of these minutes is maintained in each department and in the Office of the Dean and Director for use by any member of the academic staff. Examples of subjects discussed during such meetings are as follows:

    - Informing the public
    - Alternatives for farmers
    - Field trip reports
    - Salary scales
    - Requisitions
    - Budget overdrafts
    - Research funds
    - Budgets
    - Handling mail
    - Policy on staff members serving as "Expert Witnesses"
    - Graduate work by off-campus personnel
    - Legislative matters
    - Buildings and facilities
    - Publications on career opportunities
    - Course descriptions
    - Utilization research
    - Regional research projects
    - Student drivers
    - Department and school brochures
    - Extension Service organization and activities
    - Graduate work
    - Responsibility of Technical Committee members
    - Graduate student tax position
    - Exhibits
    - Trial study programs
    - In-service training
    - Progress reports
    - Land-Grant College and University meetings
    - Credit load and work load study
    - Long term planning
    - Graduate student assignments
    - Equipment funds

    Each year an all staff conference of four to five day duration is held, at which time the entire faculty of the division of agriculture is assembled on the campus to review and consider problems of mutual interest. In addition, meetings of resident faculty members are called periodically throughout the year to consider topics of immediate and/or general interest. Examples of topics presented and discussed during the past two years at such meetings are:

Changing Patterns in Agriculture
Education Today for Tomorrow's Needs
Modernizing Agricultural Programs
Education Today and Opportunities for Tomorrow
Off-Campus Teaching - Adult and Youth
Food and the World Hunger
Human Resources and Education
Advances in Domestic Animal Science
The Uniqueness of Plants
The Changing Population Pattern
Agricultural Curricula Review and Appraisal
Public Relations Problems of Present Day Farmers
Technology - Change and Rural Values
Nutrition of Plants and Animals
Physiology of Plants and Animals
Genetics of Plant and Animal Improvements
Processing and Marketing Plant and Animal Products

Within the division of Agriculture a number of standing committees have been appointed for the purpose of conducting work and activities of general interest to the faculty and students. For the most part, membership is changed annually. These committees are:

Agricultural Curriculum Committee
Annual Staff Conference Committee
Faculty Advisory Committee for Agricultural Awards Banquet
Ag Weekend Advisory Committee
Ag Staff Luncheon Committee
Graduate Faculty Committee
Student Transportation
Student Enrollment
Ag Scholarship Committee

In addition to the above, various subject matter departments within Agriculture conduct their own staff meetings and carry out through committee assignments various types of activities of value to the total program of the department, division of Agriculture, and Oregon State College.

Some concept of organization, responsibilities, and activities of departmental personnel in the area of faculty participation in programs in and related to education and the ultimate formation of educational policy may be gained through the following departmental statements:

A. Agricultural Economics

Organizational chart:

HEAD

Curriculum Committee	Graduate Committee	Seminar Committee	Awards Committee	Placement Committee
Reviews undergraduate programs. Organizes registration. Student counselling.	Plans graduate program. Schedules qualifying exams. Rates applicants for research awards. Grad recruitment	Meetings for professional improvement.	Recommends the undergraduate award.	(New) Committee to handle placement of undergraduates.

Department meetings usually each two weeks, with head presiding.

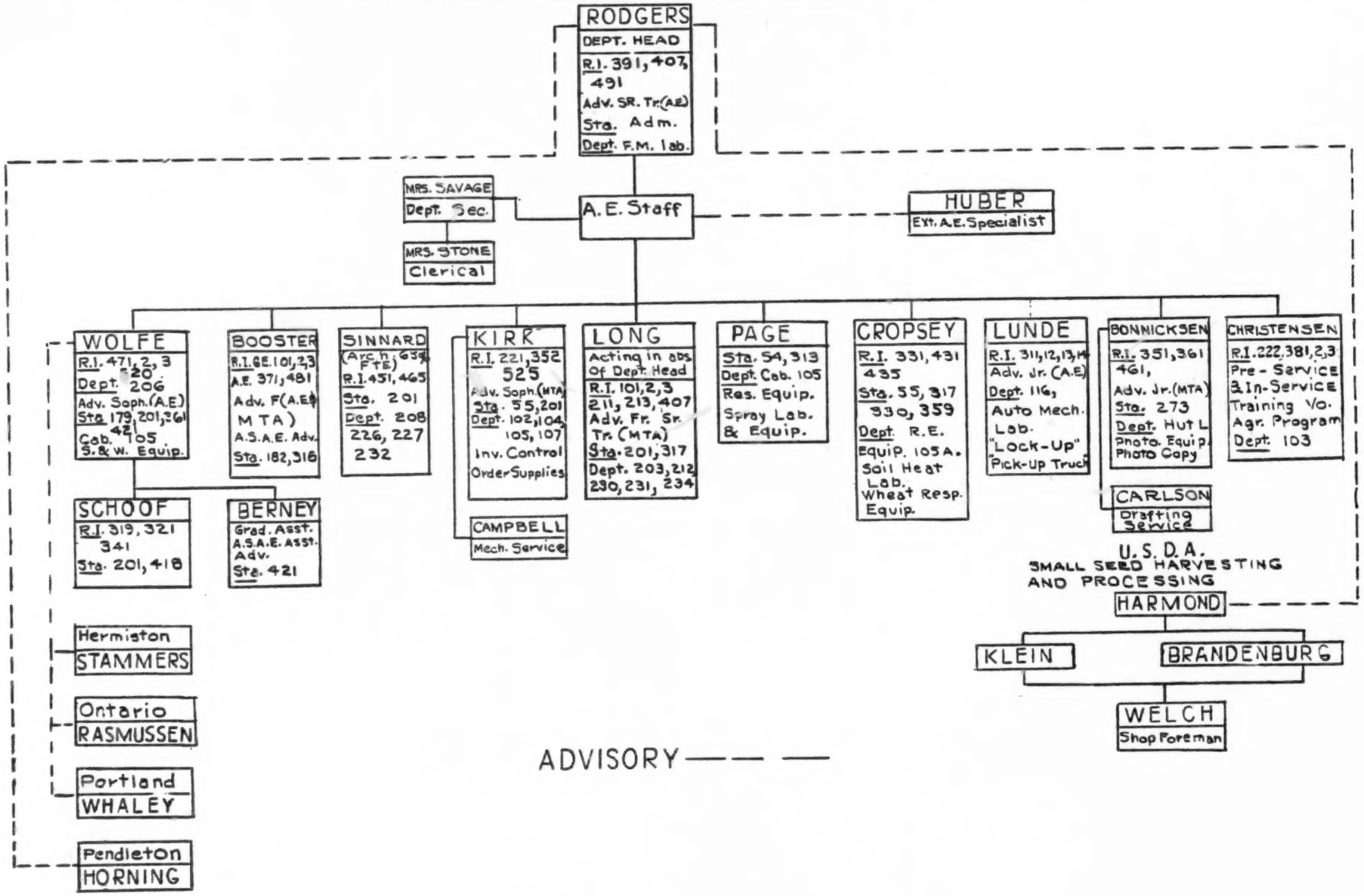
The department is operated on a democratic basis with the faculty considering each policy of operational problem.

B. Agricultural Engineering

(1) Accompanying this report is an organization chart of the department for 1959-60. In explanation, the numbers following "R.E." indicate the courses taught by the individual. "Dept." indicates the room or area for which the individual is responsible. "Adv." indicates advisor, and the group which he advises. Following "Sta." (Agricultural Experiment Station) is the number of the projects assigned to the staff member.

(2) Departmental meetings are held on call of the department head, who presides. Meetings are held once a month, and more often if necessary. A monthly "sack luncheon seminar" is held for the purpose of discussing research work or to give a staff member an opportunity to report on some meeting he attended.

DEPARTMENT OF AGRICULTURAL ENGINEERING ORGANIZATIONAL CHART 1959-60


RODGERS
DEPT. HEAD
R.I. 391, 407, 491
Adv. SR. Tr.(A.E)
Sta. Adm.
Dept. F.M. lab.
MRS. SAVAGE
Dept. Sec.
MRS. STONE
Clerical
A.E. Staff
HUBER
Ext. A.E. Specialist
WOLFE
R.I. 471, 2, 3 520
Dept. 206
Adv. Soph.(A.E)
Sta 179, 201, 261 421
Cab. 105
S. & W. Equip.
BOOSTER
R.I. GE. 101, 2, 3
A.E. 371, 481
Adv. F(A.E. MTA)
A.S.A.E. Adv.
Sta. 182, 316
SINNARD
(Arch. 63% FTE)
R.I. 451, 465
Sta. 201
Dept. 208 226, 227 232
KIRK
R.I. 221, 352 525
Adv. Soph.(MTA)
Sta. 55, 201
Dept. 102, 104, 105, 107
Inv. Control
Order Supplies
LONG
Acting in abs. Of Dept. Head
R.I. 101, 2, 3 211, 213, 407
Adv. Fr. Sr. Tr. (MTA)
Sta. 201, 317
Dept. 203, 212 230, 231, 234
PAGE
Sta. 54, 313
Dept. Cab. 105
Res. Equip.
Spray Lab. & Equip.
CROPSEY
R.I. 331, 431 435
Sta. 55, 317 330, 359
Dept. R.E.
Equip. 105A.
Soil Heat Lab.
Wheat Resp. Equip.
LUNDE
R.I. 311, 12, 13, 14
Adv. Jr. (A.E)
Dept. 116,
Auto Mech. Lab.
"Lock-Up"
"Pick-Up Truck"
BONNICKSEN
R.I. 351, 361 461,
Adv. Jr.(MTA)
Sta. 273
Dept. Hut L
Photo. Equip.
Photo Copy
CHRISTENSEN
R.I. 222, 381, 2, 3
Pre - Service & In-Service
Training Vo. Agr. Program
Dept. 103
SCHOOF
R.I. 319, 321 341
Sta. 201, 418
BERNEY
Grad. Asst.
A.S.A.E. Asst. Adv.
Sta. 421
CAMPBELL
Mech. Service
CARLSON
Drafting Service
U. S. D. A.
SMALL SEED HARVESTING AND PROCESSING
HARMOND
KLEIN
BRANDENBURG
WELCH
Shop Foreman
Hermiston
STAMMERS
Ontario
RASMUSSEN
Portland
WHALEY
Pendleton
HORNING
ADVISORY — — —

Sept. 1959

(3) Subjects discussed conern teaching, research, purchase of equipment, utilization of space, curricular matters, budgets, budget balances, and other matters pertaining to operation of the department.

(4) Minutes of staff meetings are kept, and a copy is made available to each staff member.

(5) Standing committees of the department and their duties:

Luncheon Seminar - arrange and plan the program for monthly "sack luncheon" seminar.
Curriculum (MTA and AE) - prepare catalog material and keep abreast of current trends in education as they affect the curricula, and make recommendations to staff concerning all curricular matters.
Registration - organize and handle all matters concerning preregistration and registration of students.
Photographic Equipment and Cormac Photocopy Machine - maintain photographic equipment, order supplies, counsel with staff on use and operation of equipment.
Inventory Control - organize and take the annual equipment and supplies inventories.
Supplies - order supplies needed for resident instruction and agricultural experiment station work.

(6) Very little formation of educational policy is done at the departmental level. Through members elected to the Faculty Senate, matters pertaining to educational policy and faculty welfare can be brought to the attention of the Senate.

C. Dairy and Animal Husbandry

(1) For purposes of administration and coordination, the wide field of subject matter covered by the department is subdivided into nine sections. Each section has a leader and other staff members whose training, experience and interests are such that they can make a contribution in that particular area. Every staff member is assigned to one or more sections.

Sections within the Dairy and Animal Husbandry Department are:

Beef Cattle
Dairy Cattle
Genetics
Horses

Meats
Nutrition
Physiology
Sheep and Wool
Swine

(2) After registration at the beginning of each term, one hour each week is selected for staff meetings. However, meetings are scheduled only on call of the department head, who presides. An average of two staff meetings is held per month.

(3) Subjects discussed are those affecting the department as a whole or a sizeable segment of it. Such items as curriculum, field days, short courses, housekeeping matters, departmental reviews, guest speakers, etc.

(4) Minutes are kept, typed and distributed to staff.

(5) The more important standing committees include:

a. Advisory committee to department head - counselling and guidance

b. Curriculum Committee

c. Building Space Committee - allocate space

d. Library Committee - acquisitions and usage rules

e. Graduate Committee - standards, screening applicants, handling and processing applications.

f. Small Animal Laboratory Committee - management and policies

g. Physical facilities (farm)

h. Student advisors

i. Student club sponsors

(6) a. Encouragement of open and full discussion of all matters pertaining to departmental policy.

b. Democratic procedures with majority vote required for decisions on policy matters.

c. One member of department is on Faculty Senate.

d. One member of department is on School Graduate Committee.

e. One member of department is on School Curriculum Committee.

f. Controversial matters acted on only after staff has had time to consider the issues carefully and usually after a lapse of one or more weeks.

D. Farm Crops

(1) Accompanying this report is a chart on "Current Organization of the Department". (See page 185)

(2) Four different types of departmental meetings are held. The entire staff meets on an average of once every two months with the department head presiding. A Resident Instruction Staff meeting is held twice a term with the department head presiding. A graduate staff meeting is held frequently during the fall quarter to review new graduate programs and less often during the remainder of the year. It is presided over by the chairman of the Graduate Committee for the department. A weekly staff meeting is held by the Seed Testing Laboratory personnel and is presided over by the officer in charge of seed testing.

(3) Subjects discussed pertain to the particular group called together for the meeting. The staff are acquainted with changes, budget wise, that might affect the department and problems which have been discussed at Department Head meetings held by the Dean that would be of vital interest to the staff. Certain communications to the department which are of general interest are brought to the attention of all staff. This is an opportunity for chairmen of the various standing committees to make progress reports and recommendations.

(4) Minutes are kept of these meetings and are distributed to all faculty and a file copy is retained in the Department Head's Office.

(5) Several standing committees are maintained.

(6) There is a great deal of individual and collective timely participation in the formation of the educational policy in this department by virtue of many of the key administrative problems being discussed and resolved in staff meetings. The department head makes the final

ORGANIZATIONAL CHART OF DISTRIBUTION OF FARM CROPS DEPARTMENT
ADMINISTRATIVE RESPONSIBILITIES

Department Head - J. Ritchie Cowan - Co-ordinator

Experiment Station

1. Greenhouse (Allocation of space, Maintenance and Department Representative- W. R. Furtick
2. Walk-in Freezer-Stanley Brooks
3. Use and Maintenance of
e Drier-W. S. McGuire
4. Field Days-Wheeler Calhoun
5. Special Harvester-Wheeler Calhoun, Chairman
   H. H. Rampton
   W. H. Foote
6. Future Land Needs-Wheeler Calhoun

General

1. Staff Meetings-J. Ritchie Cowan
   Secretary-Myrtle Haines
2. New Construction, Maintenance and Repair-W. R. Furtick
3. Programs for I.C.A. and other Departmental visitors-
   J. Ritchie Cowan
   Wheeler Calhoun
4. Inventory-Gladys Tharp,
   Wheeler Calhoun
5. Reporter for Agronomy News-
   W. S. McGuire
6. Radio-H. H. Rampton
7. Show Case-Bob Callihan

Resident Instruction

1. Undergraduate Advisor-W. R. Furtick
2. Graduate Program-J. R. Cowan
3. Registration-W. R. Furtick, Chairman
   J. Ritchie Cowan, W. S. McGuire
   Marvin Swearingin
4. Farm Crops Club-W. R. Furtick
5. 4-H Summer School-Bob Callihan
   Extension Agronomist
6. Ag Weekend-Bob Callihan, Warren Kronstad
7. Senior Weekend-Bob Callihan, Warren Kronstad
8. Scientists of Tomorrow-
   J. Ritchie Cowan
9. Facilities and Equipment-
   J. Ritchie Cowan, Bob Callihan, Warren Kronstad
10. Class Nursery-Bob Callihan, Marvin Swearingin

decision on the basis of the best evidence put forth during such discussions or on basis of advice that he may receive from key staff members interested in the problem under consideration.

E. Fish and Game Management

(1) Organization and Staff Member Responsibilities:

Assignment	Staff Member(s)
Curriculum	All staff members
Graduate Program	Graduate faculty
Thesis preparation	R. E. Dimick, C. E. Warren
Library	H. F. Horton, C. E. Bond
Fish collection	C. E. Bond
Mammal collection	L. W. Kuhn
Bird collection	J. B. Long
Property and supply	H. F. Horton
Audio Visual Aids	J. B. Long
Advising	All staff members
Fin and Antler Club	J. B. Long
Student Newspaper	L. W. Kuhn, C. E. Bond

(2) Departmental meetings are held when need occurs. R. E. Dimick presides.

(3) Among the subjects discussed are curriculum changes, grade point standards, level of instruction, student job opportunities, student fellowship awards, sabbatical leaves, staff changes or additions, clerical changes or additions, graduate research programs, student teaching assistants, grade point averages and possibilities of student cheating, and other items of departmental importance.

(4) Minutes of faculty meetings are not kept.

(5) Departmental educational policies are usually established at staff meetings following conferences by the department head with individual staff members. In this way each instructor can express his particular views on a subject without interference from persons with diverse interests or ideas.

F. Food and Dairy Technology

(1) Organizational Chart

Head of Department, H. W. Schultz

Research Coordinator:
General Research planning, budget control, facilities and equipment.
R. F. Cain

Undergraduate Coordinator:
Curriculum, advising, records and placement.
C. E. Samuels

Undergraduate Committee:
C. E. Samuels, Chairman
E. M. Litwiller
R. W. Stein
J. O. Young
J. H. Dietz
C. J. Wilder

Graduate Student Committee:
G. A. Richardson, Chairman
R. F. Cain
E. M. Litwiller

Graduate Curriculum Committee:
Course and curriculum development.
H. W. Schultz, Chairman
R. F. Cain
E. A. Day
C. E. Samuels

Scholarships and Awards Coordinating Committee
E. A. Day, Chairman
J. H. Dietz
R. O. Sinnhuber
H. Y. Yang

Fruit and Vegetable Processing Specialist:
R. E. Moser

Short Courses:
J. O. Young, in charge of Dairy Short Courses
L. A. Sather in charge of 4-H Summer Classes

Student Club Advisors:
OSC Dairy Club
J. O. Young (co-advisor with F. G. Heater)
Food Technology Club
J. H. Dietz

Special Visitors' Programs:
J. H. Dietz, in charge
Staff assisting

Library:
Maintenance and purchases.
R. O. Sinnhuber

Stockroom and Supplies:
Mrs. Myrna Morlin, in charge

Building and Equipment Maintenance:
T. Onsdorff - Food Technology
R. W. Stein - Dairy

Seafoods Laboratory, Astoria:
E. W. Harvey, in charge

Dairy Products Laboratory:
R. W. Stein, Superintendent
R. J. White, Plant Foreman

Food Technology Pilot Plant:
W. A. Sistrunk, in charge

Flavorium:
Lois A. Sather, in charge

Radio and TV Programs:
Lois A. Sather

Department Office Staff:
Mrs. Rose Guss, in charge
Mrs. Betty Wilson
Mrs. Harriett Powell
Mrs. Marjorie Duley
Mrs. Judith Bradshaw
Mrs. Geraldine Busch
Mrs. Janeice Uhl

Short Courses (Cont'd):
  R. E. Moser in charge of Food Technology Short Courses
  C. E. Samuels, Department representative for Food Technology Short Courses

Department Office Staff (Cont'd):
  Mrs. Valerie McDowell

(2) Departmental staff meetings are usually held every week for a two hour period. At times there is no necessity for staff meetings but such periods are used for committee meetings, e.g., undergraduate and graduate. Departmental staff meetings are presided over by the department head.

(3) Subjects discussed in staff meeting allude to undergraduate and graduate instruction, research and extension. The staff is kept well informed on policy matters, and major decisions on all phases are determined by staff action.

(4) Minutes are not kept of staff meetings.

(5) Undergraduate Committee. The function of this committee is to recommend changes in the undergraduate curriculum which may result in better training of students in Food or Dairy Technology. Recommendations of this committee are presented in staff meeting for staff discussion and voting before presentation to the Dean.

The Graduate Committee approves applicants for graduate study, keeps records of individual students and counsels the incoming graduate student prior to the designation of a major professor.

The Graduate Curriculum Committee performs the same function on the graduate level as the Undergraduate Committee.

The Scholarships and Awards Committee functions as a clearing house for activities of this type for staff, undergraduate and graduate nomination for awards.

(6) The complete revision of the undergraduate curriculum in Food and Dairy Technology, which occurred in 1957, is evidence of fine committee and staff study and decision-making.

G. Horticulture

(1) Departmental sub-divisions:

a. Tree Fruits and Nuts Section - no individual staff member directly responsible to department head for integration and coordination of research and teaching of tree fruits and nuts section.

b. Ornamental - Floriculture Section - Dr. A. N. Roberts responsible to department head for integration and coordination of research and teaching.

c. Small Fruits Section - R. Garren responsible to department head for integration and coordination of research and teaching.

d. Vegetable Crops Section - Dr. W. A. Frazier responsible to department head for integration and coordination of research and teaching.

e. Landscape - Department of Landscape responsible for teaching. Curriculum responsibilities are joint (Horticulture and Landscape). Student advisor in Horticulture Department. No research phases in this section.

(2) Departmental meetings are held weekly for one hour or every two weeks for two hours. Department head presides.

(3) Research, teaching, extension problems and programs on departmental level, departmental policy and procedure are considered.

(4) Formal minutes of staff meetings are not kept. A file is maintained on subjects discussed, and action taken. Such material is available to faculty on request.

(5) Three Standing Committees:

a. Editorial Committee - edits all publications of departmental staff members, recommending to department head.

b. Graduate Committee - considers all applicants for graduate work in this department, recommending action to department head.

c. Scholarship Committee - considers applicants for student scholarships available to department and recommends to department head.

(6) For the past 18 months periodic discussions by entire departmental faculty have been held. Purpose has been ultimate revision of existing curricula and individual course offerings. Changes in policy regarding curriculum and courses will be determined by the individual and collective faculty of this department.

H. Poultry Husbandry

(1) No organization charts are used. Responsibilities delegated each staff member are as follows:

a. Arscott, G. H., Associate Professor, Nutrition - teaching and research. In charge of feed purchasing.

b. Bernier, P. E., Professor, Poultry Breeding - teaching and research; Incubation-teaching. In charge of operations of the department's South Farm.

c. Harper, J. A., Professor, Turkey Management and Reproduction - teaching and research; Marketing Poultry Products-teaching. In charge of operations of the department's Turkey Farm.

d. McCluskey, W. H., Assistant Professor, Broiler Production-teaching and research; Management-research. Supervisor of operations of the department's Central Plant; advisor to poultry students; faculty advisor of Poultry Science Club.

e. Parker, J. E., Professor and Head. Administrative head of teaching and research programs. Poultry Production-teaching; Poultry Judging-teaching; Poultry Plant Management-teaching. Physiology (Reproduction) - research.

(2) As the department is small, regularly scheduled departmental meetings have not been held. Meetings of this kind were initiated twice during the past 13 years and "faded out" in both instances. Meetings of the department are called whenever some matter of policy or important subject needs to be discussed. As the five

members of the staff have their offices close together many informal meetings are held.

(3) Some of the subjects discussed at meetings have to do with industry problems, coordination of course material, purchase or construction of important equipment or facilities, curricular changes, assignment of tasks for some uncommon or emergency problem.

(4) Minutes of departmental meetings are not kept.

(5) There are no standing committees in the department. As previously pointed out all five staff members act as a committee.

(6) Three members of the department serve on sub-committees of the School of Agriculture Curriculum Study Committee. Two members of the department are advisors of students. One member is faculty advisor of the Ag Executive Council. One member is faculty advisor of the Alpha Zeta. One member participates in the activities of the Genetics Committee of the Graduate School. One member has served on the Research Committee of Sigma Xi. One member has been on the Faculty Council.

I. Soils

(1) Organizational pattern

No formally recognized departmental subdivisions exist, but responsibilities are delegated along the following lines:

a. Major responsibility for attention to teaching and curricula matters is delegated to the individual who teaches the Introductory Soils courses. He is the only man on the staff who devotes most of his time to resident instruction. He is expected to provide overall leadership and assist in implementing the resident instruction program in the department.

b. The chairman of the graduate staff committee gives major attention to improving the graduate program in the department.

c. Permanent staff members provide leadership in specific subject matter areas for both resident instruction and research. The general subject matter areas include: soil physics and irrigation, soil chemistry mineralogy, soil survey, soil fertility, soil biochemistry and forest soils.

(2) Departmental meetings are held on call and the department head presides. The frequency varies considerably depending on need. When special topics are under consideration, they may be held weekly or even more frequently. Unless there are pressing matters to consider, staff meetings normally are not held oftener than every two to four weeks.

Matters dealing with the graduate program are considered by members of the graduate staff who meet on call.

The chairman of this committee presides.

(3) Subjects discussed:

Any subject dealing with departmental, school or institutional program may be discussed in staff meetings. Some of the topics which have been discussed in recent years include:

a. Recommendations on proposed School of Agriculture or institutional policies

b. Curricula and course offering recommendations

c. Departmental programs and responsibilities

d. Standing and special committee reports

e. New position description and selection of personnel to fill them

f. Budgets

(4) Minutes are kept regularly and made available to all members of the staff.

(5) Number and function of standing committees

a. Library

Provide recommendations on purchase of books by college library and development and operation of small departmental library.

b. Visual Aids

This committee has been responsible for:

1. procurement of such instructional aids as a slide projector, an opaque projector, a view graph, a lettering set, etc.

2. maintenance of a 2 x 2 slide file

3. preparation of charts and graphs

4. maintenance of an educational display in the department showcase

An inventory of all visual aids in the department has been duplicated and distributed to the staff.

c. Teaching and Curriculum

The two-fold purpose of this committee is to

1. continually provide incentive to evaluate and improve our resident teaching and course offerings

2. make regular inventory of our teaching equipment and materials and purchase necessary items

d. Hospitality

This committee has the objective of promoting that intangible called good relations and understanding among staff and graduate students. This objective extends to include undergraduate students as far as possible. The objective might simply be called getting to know one another.

To accomplish this objective the committee functions in a number of ways. These include the provision of refreshments for the daily "coffee break", sending of small gifts to those ill in hospital or at home, getting the department members together to say farewell to staff members or graduate students who leave. The functions of the committee are helpful in welcoming new members into the department.

e. Graduate Committee

This committee is concerned with improving the quality of our graduate program. They develop and help implement policy on the graduate program of the department.

(6) Evidence of faculty participation in formation of educational policy:

Numerous examples might be cited. For example, in the recent overall study of curricula by the School of Agriculture, all members of the staff have participated several times in departmental discussions and preparation of material for the School of Agriculture Curriculum Committee. One concrete outgrowth of this was an overall department statement on the resident instruction program in Soils which included a variety of general information as well as detailed outlines for every course taught in the department. This statement was duplicated and distributed to all departments in the School of Agriculture. Three members of the department are functioning as members of subcommittees and one member for the first year was a member of the overall committee. When the School of Agriculture Committee preliminary proposals were developed and sent to departments for discussion, three other members of the staff reviewed special segments of the program and led discussions in staff meeting when they were considered.

The graduate staff through the past several years has developed a series of policy statements relative to improving the departmental graduate program. These have been assembled in one place for ready reference by staff or student.

J. Veterinary Medicine

The staff for research purposes are assigned to problems dealing with important diseases involving the following animal production groups:

a. Range livestock
    Beef cattle
    Sheep

b. Dairy cattle

c. Poultry
    Chickens
    Turkeys
    Other fowl

d. Other animals
    Swine
    Horses
    Furbearing animals

There is also a section of the department devoted to animal disease diagnosis. This involved necropsy of animals and the conduct of various laboratory tests necessary for the accurate determination of disease. There is also a section of the department devoted to veterinary serology as it pertains to the use of serological tests in the detection of disease in livestock including poultry. This section is also concerned with research involving the discovery and development of serological methods that may be used for the detection of animal diseases.

Departmental meetings are held at irregular intervals to discuss departmental affairs, to receive reports from staff members who have attended professional meetings, and to cover any subject matter that may be of concern to the department. At such meetings the department head serves as chairman unless he asks someone else to do so. There are no minutes kept of these meetings.

Staff are encouraged to discuss subjects concerning departmental welfare. Recently a request for enlargement of the Veterinary Diagnostic Laboratory was made. A rough draft of the expanded facility was shown to the staff, and those who will occupy the facility as well as others in the department were urged to offer suggestions for improvement in the design before it was submitted to the architect.

Candidates for positions in the department are discussed with departmental staff members whose work may bring them in close association with the applicant. When candidates are brought to the campus for interview, an effort is made to have them meet as many of the departmental staff as possible. The actual selection is made by the department head and member of the administrative staff in the Dean and Director's office.

Selection, Promotion and Dismissal

3. Procedures for selection, promotion and where necessary dismissal of academic personnel have been rather well standardized and accepted throughout the three major sub-divisions and respective departments of agriculture.

In the early stages of giving thought to the employment of new personnel either as a replacement or for a new position the department head is expected to provide the Dean and Director with a rather detailed description of the position under consideration and supporting evidence justifying the procurement request. If in the opinion of the Dean and Director and associates concerned the position should be staffed and funds are available the department head will be authorized to submit the name of the best available candidate. A search is then undertaken by the department head, who frequently seeks the assistance of academic members within the department. Prospective candidates are requested, if interested, to complete and send to the department a standard institutional application form along with transcripts of courses completed and grades received, nature and extent of experience, list of publications, and letters of recommendations. All applications are reviewed by members of the faculty in the department and the most promising candidates are subjected to a more thorough screening. In many instances this involves personal interviews both off and on the campus with the individual being considered and people who are personally acquainted with the candidate. Wherever possible the leading candidate for a senior position is brought to the campus where he and all interested staff members on the campus have an opportunity to become acquainted. Prior to any decision on the employment of a person, all staff members in the department concerned are consulted by the department head as individuals and/or collectively. The final decision to send a recommendation for employment of a new staff member forward to the President lies with the Dean and Director. Final approval to employ a person in the academic classification rests with the Oregon State Board of Higher Education.

For the most part all academic personnel are employed on a yearly basis. Normally indefinite tenure is not granted until the individual has completed service under three annual appointments. The person may then be granted indefinite tenure or continued on a trial basis (yearly) up to a total of six years. By the end of the sixth year, indefinite tenure is to be granted or the individual advised by letter that his or her employment will be terminated at the end of the next fiscal year. The following quotation from the Administrative Code is pertinent at this point:

> "It is recognized that at times it may be desirable to grant indefinite tenure to persons appointed with the rank of full professors before the end of three years, and occasionally even at the time of original appointment."

In any instance where a staff member's services become unsatisfactory, he is advised by the Department Head and/or the Dean and Director. The individual is offered every opportunity to show that judgment is wrong. Where appropriate, adjustments in assignment within the total organization are made. If after due course of time the individual's work remains unsatisfactory, he is advised, in writing, to seek employment elsewhere. Such a notice of termination of employment is given at least one year prior to the final date. All assistance possible is provided the individual in locating suitable employment. Only under exceptional circumstances would an individual be summarily dismissed.

Procedures vary by departments on selecting individuals for promotion. However, such recommendations are carefully reviewed each year by the Dean and Director and all members of his administiative staff. At this level the name of every faculty member with rank and salary indicated is considered along with that of every other faculty member irrespective of departmental assignment. After such a review is made, individual department heads are asked to look over the realignments and given an opportunity to propose and justify desired modifications. By this means it is felt that, at least within agriculture, staff members are moved along on a comparative basis with the total faculty and that changes in rank and salary are in keeping with their performance, both as teachers and research workers. Recommendations are then forwarded to the President for his consideration.

Teaching Load

The student-faculty load in agriculture as expressed by a ratio of number of full-time students to the FTE of staff members amounts to 17.7 to 1 without the inclusion of staff time assigned to Farm Service activities or 16.9 to 1 with such time. Since approximately 40% of an agricultural student's time is spent in course work taught outside of the School of Agriculture, a more realistic ratio in agriculture would be 10 to 1.

Another approach in appraising the student faculty load is to consider the student credit hours taught within the school per 1 FTE. For the 1959-60 Fall quarter this amounted to 91 undergraduate credits and 18½ graduate credits or a combined total of 109½ credits.

The tabulation that follows will provide the reader with information on courses taught by departments within the School of Agriculture during the 1958-59 academic year, names of instructors, enrollment figures and related information.

A. Agricultural Economics

INSTRUCTIONAL LOAD

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
G. B. Wood								
AEc 407 Seminar	Fall	1	1	1	13	-	-	Taught AEc 407, spring term for General Extension Division in Portland
AEc 505 R & C	Fall	3	3	3	1	-	1	
AEc 507 Seminar	Fall	1	1	1	4	4	-	
AEc 505 R & C	Spring	3	3	3	1	1	-	
AEc 523 Anal. of Ag Policies	Spring	3	3	2	9	7	2	
AEc 411 Ag'l Policy	Spring	3	3	3	29	1	-	
G. E. Blanch								
AEc 405 R & C	Winter	3	3	3	1	-	-	Major professor -- 5 graduate students. Minor professor -- 3 graduate students. Undergrad student counseling
AEc 431 Ag'l Finance	Spring	3	3	3	19	1	2	
AEc 425 Ag'l Appraisal	Spring	3	3	3	14	-	2	
H. F. Hollands								
AEc 572 Adv. Ag'l Marketing	Fall	3	3	2	3	3	-	
AEc 341 Prin. of Ag Marketing	Fall	3	3	3	34	-	-	
G. E. Korzan								
AEc 342 Ag Cooperation	Fall	3	3	3	3	-	-	
AEc 111 Intro to Ag Economics	Fall	3	3	3	39	-	-	
AEc 505 R & C	Fall	2	2	1	1	1	-	
AEc 573 Ag Price An.	Fall	3	3	3	9	9	-	

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Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
G. E. Korzan (cont'd)								
AEc 451 Ag'l Prices	Spring	3	3	3	23	1	-	
AEc 505 R & C	Spring	2	3	2	1	1	-	
D. C. Mumford								
AEc 111 Intro. to Ag Economics	Winter	3	3	3	25	-	-	Member of faculty senate; Secretary, Faculty Welfare Committee Advisor, Agriculture Executive Council
AEc 418 Fed. Progress & Farmer	Winter	3	3	3	10	1	-	
E. N. Castle								
AEc 211 Prin. of Farm Management	Fall	3	3	3	26	-	-	Dept. Graduate Committee; School of Ag. Grad. Committee
AEc 505 R & C	Fall	1	1	1	1	-	1	
AEc 401 Research	Fall	1	1	1	1	-	-	
AEc 521 Ag'l Production Econ.	Fall	3	3	2	12	-	-	
AEc 407 Seminar	Winter	1	1	1	14	-	-	
AEc 462 Ag. Land Ec.	Winter	3	3	3	18	-	-	
AEc 505 R & C	Winter	3	3	2	2	2	-	
AEc 507 Seminar	Winter	1	1	1	4	1	3	
AEc 522 Ag'l Production Econ.	Winter	3	3	2	7	1	6	
S. K. Christensen								
AEc 440 Livestock Ec	Fall	3	3	3	17	3	3	School of Agriculture All Staff Curricular Committee Advisor - 23 Undergraduates; Advisor - 3 Graduates
AEc 341 Prin. of Ag'l Marketing	Winter	3	3	3	55	-	-	
AEc 444	Winter	3	3	3	15	2	2	
AEc 505 R & C	Winter	3	3	3	1	-	1	
AEc 505 R & C	Spring	3	3	3	1	-	1	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
G. R. Sitton								
AEc 312 Applied Ag'l Economics	Fall	3	3	3	11	-	-	
AEc 405 R & C	Fall	1	1	1	1	-	-	
AEc 414 Farm Org.	Fall	3	3	3	25	-	-	
AEc 505 R & C	Fall	1	1	1	1	1	-	
AEc 505 R & C	Fall	3	3	3	1	1	-	
AEc 405 R & C	Winter	3	3	3	1	-	-	
AEc 505 R & C	Winter	3	3	2	1	-	1	
AEc 111 Intro. to Ag Economics	Spring	3	3	3	9	-	-	
AEc 405 R & C	Spring	3	3	3	1	-	-	
AEc 407 Seminar	Spring	1	1	1	15	-	-	
AEc 505 R & C	Spring	2	2	1	1	-	1	
AEc 507 Seminar	Spring	1	1	1	4	3	1	
W. G. Brown								
AEc 505 R & C	Spring	3	3	3	1	1	-	
R. D. Langmo								
AEc 421 Mktg. Effic. Analysis	Winter	3	3	3	9	-	-	
M. Becker								
AEc 505 R & C	Winter	3	3	3	1	-	1	
AEc 211 Prin. of Farm Management	Spring	5	5	5	36	-	-	
AEc 211 Prin. of Farm Management	Spring	5	5	5	29	-	-	
AEc 311 Farm Income Tax Mgt.	Spring	2	2	2	22	-	-	
AEc 401 Research	Spring	3	3	3	1	-	-	

B. Agricultural Engineering

INSTRUCTIONAL LOAD

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
J. B. Rodgers								
AE 231 Farm Imp.	Fall	3	5	3	14	-	-	
AE 501 Research	Fall	3	2	1	1	-	1	
AE 505 R & S	Fall	3	1	1	2	1	1	
AE 491 Power Farming Mach.	Winter	3	5	3	10	-	-	
AE 407 Seminar	Winter	1	1	1	10	-	-	
AE 506 Projects	Winter	4	1	1	1	1	-	
AE 231 Farm Imp.	Spring	3	5	3	21	-	-	
AE 405 R & C	Spring	3	1	1	1	-	-	
AE 407 Seminar	Spring	1	1	1	11	-	-	
AE 505 R & C	Spring	3	1	1	1	-	1	
H. R. Sinnard								
AE 405 R & C	Fall	3	1	1	1	-	-	
AE 451 Rural House Planning	Winter	3	5	3	18	-	-	
AE 465 Bldg. Cost Estimating	Spring	3	6	3	39	-	-	
AE 405 R & C	Spring	3	3	3	7	-	-	
AE 505 R & C	Spring	3	3	3	1	-	1	
R. N. Lunde								
AE 311 Farm Motors & Tractors	Fall	3	5	3	24	-	-	
AE 312 Auto. Mech.	Fall	3	5	3	17	-	-	
AE 401 Research	Fall	1	1	1	1	-	-	
AE 311 Farm Motors & Tractors	Winter	3	5	3	24	-	-	
AE 313 Auto. Mech.	Winter	3	13	7	26	-	-	
AE 501 Research	Winter	3	3	3	1	1	-	
AE 506 Projects	Winter	3	3	3	1	1	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
R. N. Lunde (Cont'd)								
AE 311 Farm Motors & Tractors	Spring	3	4	2	20	-	-	
AE 313 Auto. Mech.	Spring	3	7	3	10	-	-	
AE 314 Auto. Mech.	Spring	3	4	2	7	-	-	
AE 405 R & C	Spring	3	1	1	3	-	-	
AE 501 Research	Spring	3	3	3	1	-	-	
AE 506 Projects	Spring	1	1	1	1	1	-	
M. G. Cropsey								
AE 331 Farm Elec.	Winter	3	4	3	15	-	-	
AE 331 Farm Elec.	Winter	3	5	3	12	-	-	
AE 405 R & C	Winter	1	1	1	1	-	-	
AE 431 Rural Elec.	Spring	3	5	3	10	-	-	
AE 435 Household Utilities	Spring	3	8	5	24	-	-	
AE 405 R & C	Spring	3	1	1	1	-	-	
AE 530 Ag. Ins. & Application	Spring	3	1	1	4	-	-	
J. W. Wolfe								
AE 471 Soils & Water Cons.	Fall	3	3	3	13	-	-	
AE 472 Drainage Eng.	Winter	3	5	3	7	-	-	
AE 473 Irrig. System Design	Spring	3	5	3	9	-	-	
AE 530 Ag. Ins. & Application	Spring	3	1	1	4	3	1	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
D. E. Kirk								
AE 221 Farm Mech.	Fall	3	13	5	25	-	-	
AE 221 Farm Mech.	Winter	3	14	5	32	-	-	
AE 352 Food Plant Mech.	Winter	3	5	3	15	-	-	
AE 221 Farm Mech.	Spring	3	7	3	9	-	-	
AE 505 R & C	Spring							
AE 530 Ag. Ins. & Application	Spring	3	1	1	4	-	-	
L. W. Bonnicksen								
AE 461 Farm Structures	Fall	3	7	3	13	-	-	
AE 351 Food Plant Graph.	Winter	3	4	3	11	-	-	
AE 361 Farm Bldgs.	Spring	3	5	3	19	-	-	
D. R. Long								
AE 211 AE Survey	Fall	3	13	7	28	-	-	
AE 211 AE Survey	Winter	3	9	5	28	-	-	
AE 407 Seminar	Winter	1	1	1	11	-	-	
AE 211 AE Survey	Spring	3	13	7	44	-	-	
AE 407 Seminar	Spring	1	1	1	12	-	-	
D. E. Booster								
AE 101 Mech. Prob. in Agric.	Fall	1	3	2	21	-	-	
GE 101 Eng. Concepts	Fall	3	6	3	15	-	-	
AE 102 Mech. Prob.	Winter	1	3	2	19	-	-	
AE 481 Ag. Machine Design	Winter	3	7	3	7	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
D. E. Booster (Cont'd)								
GE 102 Eng. Concepts	Winter	3	6	4	19	-	-	
GE 103 Eng. Concepts	Spring	3	6	4	15	-	-	
AE 103 Mech. Prob.	Spring	1	3	2	16	-	-	
AE 405 R & C	Spring	3	3	1	1	-	-	
AE 505 R & C	Spring	3	3	1	2	-	2	
L. V. Christensen								
AE 406 Projects	Fall	1	4	2	16	-	-	
AE 505 R & C	Fall	3	3	3	1	-	1	
AE 406 Projects	Winter	1	4	2	19	-	-	
AE 406 Projects	Spring	1	4	2	19	-	-	
AE 222 Farm Mech.	Spring	3	7	3	7	-	-	
J. E. Schoof								
AE 321 Pumps & Irrig. Equip.	Fall	3	4	3	14	-	-	
AE 341 Use of Explosives	Winter	2	1	1	37	-	-	
AE 319 Land Drainage	Spring	3	5	3	22	-	-	

C. Dairy and Animal Husbandry

INSTRUCTIONAL LOAD
1958-59

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students: Majors	Number of Grad. Students: Minors	Other Instructional Responsibilities
J. C. Miller								
DAH 424 Beef Cattle Husbandry	Spring	3	4	3.3	27	-	-	Coordination of all resident instruction in Dairy-An. Husbandry Department
DAH 407 Seminar	Spring	1	1	1.1	14	-	-	
Ralph Bogart								
DAH 503 Thesis	Fall	3	9	--	9	9	3	Adv. 15 under-grads in AH; adv. 1 B & T minor in AH; Chairman Grad. Admissions Comm.; Chairman, By-Laws Committee, Faculty Senate
DAH 474 Domestic Animals[1]	Fall	3	3	.8	10	-	-	
DAH 503 Thesis	Winter	3	9	--	9	-	-	
DAH 473 Livestock Genetics	Spring	4	6	2.7	18	-	-	
J. R. Haag								
DAH 511 Animal Nutrition	Winter	5	5		15	-	-	
I. R. Jones								
DAH 322 Dairy Herd Management	Fall	3	3	3.1	8	3	-	Adv. upper division, under-grad students in Dairy Products
DAH 407 Seminar	Fall	1	1	1(per term)	5	-	-	
DAH 503 Thesis	Fall	3		.7	4	-	-	
DAH 414 Breeding Dairy Cattle	Winter	3	3	2.7	7	-	-	

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[1] Taught jointly with Kruger, Oldfield and Wu

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Prepara- tions	Enroll- ment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
I. R. Jones (Cont'd)								
DAH 407 Seminar	Winter	1	1	1(per term)	6	-	-	
DAH 503 Thesis	Winter	3		.7	4	-	-	
DAH 413 Dairy Cattle Feeding	Spring	3	3	2.5	14	-	-	
DAH 431 Pedigree Studies	Spring	2	4	.8	4	-	-	
DAH 503 Thesis	Spring	4		1.1	4	-	-	
Hugo Krueger								
DAH 574 Growth in Domestic Animals[1]	Fall	3	3	1.4	9	-	16	Ag: Sub-comm. on physical science curr; College Press Style Manual; DAH: Curr. Comm.
DAH 503 Thesis	Fall	3	9	--	3	-	-	
DAH 503 Thesis	Winter	3	9	--	3	-	-	
DAH 476 Reproduction Problems[2]	Spring	3	5	1.8	8	-	-	
DAH 503 Thesis	Spring	3	9	--	3	-	-	
F. F. McKenzie								
DAH 121 Intro. to Dairy & Animal Science[3]	Fall	3	3	1.8	80	1	-	Dept. Curr. Comm. (Graduate Section); Ag Banquet Comm.; 2 Turkish ICA participants; Chairman, Hoblitzelle Award Comm.
DAH 574 Growth in Domestic Animals[4]	Fall	3	3	1.4	9	-	-	

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[1] Taught jointly with Bogart, Oldfield, McKenzie, and Wu
[2] Taught jointly with McKenzie and Wu
[3] Taught jointly with F. B. Wolberg
[4] Taught jointly with R. W. Bogart, J. E. Oldfield, Hugo Krueger and S. H. Wu

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
F. F. McKenzie (Cont'd)								
DAH 316 Animal Breeding	Winter	3	3	2.7	26	-	-	
DAH 505 R & C	Winter	5	2	--	1	-	-	
DAH 427 Artificial Insemination of Dairy Cattle[1]	Spring	3	4	1.4	8	-	-	
DAH 476 Reproduction Problems[2]	Spring	3	5	1.8	8	-	-	
DAH 503 Thesis	Spring	2	1	--	1	-	-	
J. E. Oldfield								
DAH 411 Animal Nutrition II	Fall	4	3	3.6	40	7	4	Adv. Jr. DAH students (approx. 21); Fac. Senate; School of Ag. Scholarships & Awards Comm., Curr. Comm.
DAH 574 Growth in Domestic Animals[3]	Fall	3	3	.9	10	-	-	
DAH 505 R & C	Fall	3	3	.7	1	-	-	
DAH 412 Livestock Feeding	Winter	3	3	2.7	28	-	-	
DAH 405 R & C	Winter	3	1	.7	2	-	-	
C. E. Poulton	ON SABBATICAL LEAVE							

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[1] Taught jointly with F. B. Wolberg

[2] Taught jointly with Hugo Krueger and S. H. Wu

[3] Taught jointly with R. Bogart, H. Krueger, F. McKenzie and S. Wu

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
D. W. Hedrick								
DAH or FC 341 Range Mgt.	Fall	2	2	.2	48	-	-	Adv. 12 under-grad. students in RM; Dept. Comm's: Library, Brochure, Curr.
DAH or FC 341 Range Mgt.	Winter	2	2	.2	50	-	-	
DAH or FC 442 Range Mgt. Planning	Winter	3	4	3.3	8	-	-	
DAH 405 R & C	Winter	2	4	2.2	2	-	-	
F. B. Wolberg								
DAH 121 Intro. to Dairy & Animal Husb.[1]	Fall	3	3	3.4	80	2	-	DAH Curr. Comm.; Adv. Ag Weekend; Adv. undergrad. students in Dairy Production.
DAH 425 Dairy Cattle Judging	Fall	1			10	-	-	
DAH 121 Intro. to Dairy and Animal Husb.	Winter	3	3	3.4	38	-	-	
DAH 320 Herd Record Systems	Winter	3	3	3.4	8	-	-	
DAH 405 R & C (Art. Insem.)	Winter	2	4		2	-	-	
DAH 405 R & C (Livestock Terminology)	Winter	2	2		2	-	-	
DAH 121 Intro. to Dairy & Animal Husb.	Spring	3	3	3.4	30	-	-	

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[1] Taught jointly with F. F. McKenzie

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
F. B. Wolberg (Cont'd)								
DAH 427 Art. Insemination of Dairy Cattle	Spring	3	4		9	-	-	
DAH 405 R & C (Dairy Cattle Selection)	Spring	2			3	-	-	
D. C. Church								
DAH 311 Animal Nutrition I	Fall	4	3	3.6	34	1	-	Adv. 15 Gen. Ag. Undergrads.
DAH 131 Judging and Selection[1]	Winter	2	6	2.3	30	-	-	
DAH 507 Seminar[2]	Winter	1	1	.5	8	-	-	
D. C. England								
DAH 507 Thesis	Fall	1	1	--	15	-	-	Gen. Exec. Comm.; Member Gen. Fac. Comm. on Preparation of guide for grads teaching; member Dept. Genetics Committee
DAH 423 Swine Husb.	Winter	3	4	2.5	16	2	2	
DAH 507 Thesis	Winter	1	1	--	14	-	-	
DAH 507 Thesis	Spring	1	1	--	3	-	-	
C. W. Fox								
DAH 481 Wool & Mohair	Fall	3	4	3.3	5	-	-	Chm., Dept. Curr. Comm.; School of Ag; Comm. on Intro. Courses; Mgt. Advisor of College Sheep flock used for R.I., Adv. 15 soph. in DAH.
DAH 507 Seminar	Fall	1	1	.5	8	-	-	
DAH 422 Sheep Husb.	Winter	3	4	4.1	17	-	-	
DAH 131 Judging and Selection[3]	Winter	3	4	4.1	17	-	-	

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[1] Taught jointly with F. G. Hueter
[2] Taught jointly with C. W. Fox
[3] Taught jointly with D. C. Church

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
C. W. Fox (Cont'd)								
DAH 507 Seminar	Winter	1	1	--	2	-	-	
DAH 507 Seminar	Spring	1	1	--	2	-	-	
F. G. Hueter								
DAH 507 Seminar	Winter	1	1	--	8	-	-	
DAH 131 Judging & Selection[1]	Winter	2	6	2.3	30	-	-	
A. W. Oliver								
DAH 351 Meats	Fall	3	7	2.7	8	-	-	Adv. 12 freshmen students; Student Bldg. Comm.; Horse Judging Short Course; Advisor to Withycombe Club
DAH 421 Horse Husb.	Fall	1	2	.9	7	-	-	
DAH 405 R & C	Fall	1	3	.5	3	-	-	
DAH 352 Meat Ident & Selection	Winter	3	5	2.7	15	-	-	
DAH 331 Types & Mkt. Classes of Livestock	Winter	3	4	.9	4	-	-	
DAH 405 R & C	Winter	1	4	.5	9	-	-	
DAH 351 Meats	Spring	3	7	2.7	12	-	-	
DAH 405 R & C	Spring	1	2	.5	7	-	-	
S. H. Wu								
DAH 574 Growth in Domestic Animals[2]	Fall	3	3	1.4	10	-	-	
DAH 476 Repro. Problems[3]	Spring	3	5	.1	8	-	-	

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[1] Taught jointly with D. C. Church

[2] Taught jointly with R. Bogart, H. Krueger, and J. Oldfield

[3] Taught jointly with H. Krueger, and F. McKenzie

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
R. S. Driscoll								
DAH or FC 341 Range Mgt.	Fall	1	4	1.1	48	-	-	
DAH or FC 341 Range Mgt.	Winter	1	4	1.1	50	-	-	
DAH or FC 443 Range Mgt.	Winter	3	3	2.2	9	-	-	
DAH or FC 441 Range Methods	Spring	4	6	4.4	15	-	-	
P. M. Rutland								
PE 180)-Beg.	Fall	1	2	.2	3	-	-	
PE 190) Riding	Fall	1	2	.2	3	-	-	
PE 380)-Inter.	Fall	1	2	.2	1	-	-	
PE 180) Riding	Fall	1	2	.2	6	-	-	
PE 390)-Adv.	Fall	1	2	.2	2	-	-	
PE 190) Riding	Fall	1	2	.2	1	-	-	
PE 180)	Fall	1	2	.2	10	-	-	
PE 180)-Beg.	Winter	1	2	.2	1	-	-	
PE 190) Riding	Winter	1	2	.2	1	-	-	
PE 390)	Winter	1	2	.2	1	-	-	
PE 100 Int.	Winter	1	2	.2	3	-	-	
PE 390)-Adv.	Winter	1	2	.2	1	-	-	
PE 190) Riding	Winter	1	2	.2	1	-	-	
PE 180)	Winter	1	2	.2	3	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Prepara-tions	Enroll-ment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
P. M. Rutland (Cont'd)								
PE 180)	Spring	1	2	.2	10	-	-	
PE 190)-Beg.	Spring	1	2	.2	3	-	-	
PE 380) Riding	Spring	1	2	.2	1	-	-	
PE 390)	Spring	1	2	.2	2	-	-	
PE 180)-Int.	Spring	1	2	.2	5	-	-	
PE 190) Riding	Spring	1	2	.2	1	-	-	
PE 380)	Spring	1	2	.2	3	-	-	
PE 180)-Adv.	Spring	1	2	2.0	2	-	-	
PE 380) Jumping	Spring	1	2	2.0	1	-	-	
PE 390)	Spring	1	2	2.0	2	-	-	
PE 180)-Adv.	Spring	1	2	.2	10	-	-	
PE 190) Riding	Spring	1	2	.2	1	-	-	
PE 280)	Spring	1	2	2.0	1	-	-	
T. K. Johnson								
DAH 426 Stock Judging	Fall	1	3	.1	7	-	-	Coach, Livestock Judging Team

D. Farm Crops

INSTRUCTIONAL LOAD
1958-59

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Prepara- tions	Enroll- ment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
J. R. Cowan								
FC 111 Agron. I	Fall	3	5	4	44	6	3	Student counseling 4 comm., Pres. AAUP Chap., Fac, Senate Acting Dept. Head (April 1, 1959 - June 30, 1959)
FC 505 Seed Prod.	Spring	2	2	3	2	-	-	
FC 507 Seminar	Spring	1	1	1	10	-	-	
FC 521 Crop Prod.	Spring	3	3	5	10	-	-	
FC 415 Plant Breeding	Spring	3	3	5	12	-	-	
D. D. Hill								
FC 414 Seed Prod.	Fall	3	3	3	35	10	8	Department Head
FC 407 Seminar	Fall	1	1	1	10	-	-	
FC 411 Crop Insp.	Winter	4	6	4	10	2	-	
FC 311 Potato Prod.	Winter	2	2	2	15	-	-	
FC 521 Crop Prod.	Spring	1	1	1	10	7	3	
FC 414 Seed Prod.	Fall	3	3	3	31	7	-	
R. L. Davis								
FC 415 Plant Brdg.	Fall	3	3	3	10	7	3	Counseling Grad. Students
W. H. Foote								
FC 517 Plt. Gen.	Winter	3	4	4	14	8	2	Fac. Comm. Sch. Ag. Chairman, Dept. Grad. Committee; Faculty Senate
FC 416 Field-Plot Technique	Spring	3	4	4	12	-	-	
FC 521 Crop Prod.	Spring	3	3	2	10	-	-	
FC 419 Ind. Crops	Winter	3	3	3	12	-	-	
FC 407 Seminar	Winter	1	1	1	10	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Minors	Other Instructional Responsibilities
C. E. Poulton								
	(1958-59 ON SABBATICAL LEAVE)							DAH Grad. Comm. Chairman, Sch. Comm. on Enrollment, Adm. Range Instr., Prog. thru DAH & FC, DAH Curric. Comm. Student Counseling
DAH or FC 341 Range Mgt.	Fall	3	6	3	39	6	1	
DAH or FC 405 R & C	Fall	3	-.5	-1	1	-	-	
DAH or FC 505 R & C	Fall	3	1	1	1	-	-	
D. W. Hedrick								
DAH or FC 341 Range Mgt.	Fall	3	6	3	48	4	-	Chm. DAH Lib. Comm. DAH Brochure Comm. DAH Curric. Comm. Admin. Range Instr. Prog. thru DAH & FC
DAH or FC 341 Range Mgt.	Winter	2	2	2	50	4	-	
DAH or FC 442 Range Mgt.	Winter	3	5	3	8	-	-	
DAH or FC 405 R & C	Winter	2	-1	-1	2	-	-	
DAH or FC 442 Range Mgt.	Spring	3	5	3	8	4	-	
	(Fall 1959-60 ON SABBATICAL LEAVE)							
L. A. Jensen								
FC 505 R & C	Fall	4	6	3	2	-	2	Advice to Mrs. Sripleng
FC 505 R & C	Winter	3	4	3	2	-	2	
FC 505 R & C	Winter	2	2	3	3	-	2	
W. R. Furtick								
FC 518 Herbicides	Fall	3	4	2	5	5	-	Traffic Comm.
FC 507 Seminar	Fall	1	1	1	16	10	6	FC Club Advisor
FC 505 R & C	Fall	2	1	1	1	1	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
W. R. Furtick (Cont'd)								
FC 317 Weed Cont	Spring	3	4	3	24	-	-	
FC 521 Crop Prod.	Spring	3	1	1	10	8	2	
FC 518 Herbicides	Fall	3	3	3	4	4	-	
FC 503 Thesis	Fall	9	3	-	3	3	-	
W. S. McGuire								
FC 211 Agron. II	Fall	3	4	2	39	4	1	Asst. with FC 520 Crop Production
FC 211 Agron. II	Spring	3	4	2	34	-	-	
FC 211 Agron. II	Fall	3	4	2	22	-	-	
FC 324 Frg. Crops	Spring	3	4	2	19	-	-	
FC 520 Consv. Cropping (1958)	Fall	2	2	2	18	-	-	
FC 520 Consv. Cropping (1959)	Fall	2	2	2	13	-	-	
FC 507 Seminar	Fall	1	1	1	17	-	-	
T. M. Ching								
FC 505 Seed Phy.	Spring	4	6	10	6	2	-	Consulting with grad. stu's res.; Adv. grad. stu.; Sem. 507 ea. term; Giving guest lect.
FC 507 Seminar	Winter	1	1	2	11	-	-	
H. L. Schudel								
FC 313 Lawns & Turf	Winter	2	3	2	14	-	-	Student counseling
FC 318 Wildlife Food Crops	Winter	3	4	3	36	-	-	
FC 342 Range Imp.	Winter	3	4	3	7			
FC 411 Crop Insp.	Winter	1	4	2	15	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
D. O. Chilcote								
FC 211 Agron. II	Spring	3	3	3	37	-	-	
FC 407 Seminar	Spring	1	1	1	10	-	-	
FC 322 Cereal Prod.	Winter	3	3	3	17	-	-	
FC 323 Cereal Morphology	Winter	2	4	2	11	-	-	
R. H. Callihan								
FC 111 Agron. I	Fall	3	11	6	75	-	-	
M. L. Swearingin								
FC 111 Agron. I	Fall	3	11	8	42	-	-	Student counseling, Freshman and transfer students. Gathering Instr. teaching materials. Developing and maintaining Instr. Nursery, Dept. comm's., and misc.
FC 111 Agron. I	Winter	3	11	8	56	-	-	
FC 111 Agron. I	Spring	3	11	8	65	-	-	
FC 111 Agron. I	Fall	3	4	3	83	-	-	
K. H. McGuire								
FC 111 Agron. I	Winter	3	2	1	16	-	-	
FC 318 Wildlife Food Crops	Winter	1	2	1	36	-	-	
FC 415 Plant Brd.	Spring	1	2	1	11	-	-	
FC 211 Agron. II (Rec)	Fall	2	2	1	22	-	-	
FC 211 Agron. II (Lab)	Fall	2	4	1	7	-	-	
FC 407 Seminar	Fall	1	1	1	10	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
W. E. Kronstad								
FC 111 Agron. I	Fall	3	6	2	75	-	-	Short course for Ag teachers
FC 211 Agron. II	Fall	3	4	1	22	-	-	
R. S. Driscoll								
DAH or FC 341 Range Mgt.	Fall	1	4	1	52	-	-	No instructional load Fall 1959-60. Work consists of Coop. Warm Springs studies.
DAH or FC 341 Range Mgt.	Winter	1	4	1	49	-	-	
DAH or FC 443 Range Mgt.	Winter	3	5	3	9	-	-	
DAH or FC 441 Range Meth.	Spring	4	7	4	15			
B. G. Wilcox								
FC 111 Agron. I	Fall	3	6	3	44	-	-	
FC 111 Agron. I	Winter	3	6	3	61	-	-	
FC 111 Agron. I	Spring	3	6	3	54	-	-	

E. Fish and Game Management

INSTRUCTIONAL LOAD

1958-59

Fall Quarter 1959 (w/asterisk)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
R. E. Dimick								
FG 407 Seminar	Fall	1	4	1	44	-	-	General advisor to 200 major students
FG 503 Thesis	Fall	3	9		9	-	-	
FG 407 Seminar	Winter	1	3	1	41	-	-	
FG 503 Thesis	Winter	3	4		4	-	-	
FG 561 Invert. Fish	Winter	3	4	3	4	-	-	
FG 407 Seminar	Spring	1	3	1	37	-	-	
FG 503 Thesis	Spring	3	7		7	-	-	
FG 562 Invert. Fish	Spring	3	4	3	4	-	-	
FG 407 Seminar	*Fall	1	3	3	36	-	-	
Z 571 Ichthyology	*Fall	3	5	3	8	-	-	
FG 503 Thesis	*Fall	3	5		2	8	-	
FG 274 Econ Ichthy.	*Fall	2	3	3	50	-	-	
J. B. Long								
FG 251 Wildlife Conservation	Fall	3	3	3	92	-	-	Agric. Curriculum Comm. Summer training program for 4-H students; Audio-visual aids; Fin and Antler Club advisor; Advisor to 35 students
FG 261 Wildl. Tech.	Fall	3	9	4	43	-	-	
FG 405 R & C	Fall	2	1		1	-	-	
FG 451 Mgmt Game Birds	Fall	3	6	3	31	-	-	
FG 401 Research	Fall	2	1		4	-	-	
FG 251 Wildl. Con.	Winter	3	4	3	62	-	-	
FG 319 Hist. & Lit. Wildl. Mgt.	Winter	3	3	3	15	-	-	
FG 405 R & C	Winter	2	1		2	-	-	
FG 452 Mgmt. Game Birds	Winter	3	5	3	30	-	-	
FG 501 Research	Winter	2	1		1	1	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Prepara-tions	Enroll-ment in Course	Number of Grad. Students Majors	Minors	Other Instructional Responsibilities
J. B. Long (Cont'd)								
FG 261 Wildl. Tech.	Spring	3	11	4	75	-	-	
FG 405 R & C	Spring	2	1		1	-	-	
FG 453 Mgmt. Game Birds	Spring	3	6	3	23	-	-	
FG 251 Wildl. Con.	*Fall	3	3	3	79	-	-	
FG 261 Wildl. Tech.	*Fall	3	5	4	12	-	-	
FG 405 R & C	*Fall	3	1		1	-	-	
FG 451 Mgmt. Game Birds	*Fall	3	6	4	36	-	-	
FG 401 Research	*Fall	2	1		4	-	-	
FG 505 R & C	*Fall	3	1		1	-	-	
L. W. Kuhn								
FG 281 Wildl. Mgt.	Fall	3	8	5	65	-	-	
FG 405 R & C	Fall	3	1		1	-	-	
FG 457 Mgmt. Big Game	Fall	3	6	4	33	-	-	
FG 282 Wildl.Mgt.	Winter	3	6	4	65	-	-	
FG 341 FG Law Enforcement	Winter	2	3	2	30	-	-	Study skin and skull collection; "News and Views" student paper advisor; Summer training program for 4-H students; Agric. Curr. Comm.; Advisor to 35 students
FG 401 Research	Winter	3	1		2	-	-	
FG 405 R & C	Winter	3	1		1	-	-	
FG 460 Mgmt. Furbear.	Winter	3	4	3	42	-	-	
FG 283 Wildl. Mgt.	Spring	3	8	5	52	-	-	
FG 320 Rodent Control	Spring	3	6	4	21	-	-	
FG 405 R & C	Spring	3	1		1	-	-	
FG 505 R & C	Spring	3	1		1	-	-	
FG 458 Mgmt. Big Game	Spring	3	4	3	30	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
L. W. Kuhn (Cont'd)								
FG 281 Wildl.Mgt.	*Fall	3	8	5	64	-	-	
FG 405 R & C	*Fall	3	1		1	-	-	
FG 457 Mgt. Big Game	*Fall	3	4	3	30	-	-	
C. E. Bond	Sabbatical Leave this school year; normally teaches the following:							
FG 274 Econ. Ichthy.	Fall	2	3	3	55	-	-	Fisheries collection; Student advisor to 30 fishery majors; "News and Views" student paper advisor; Agric. Curric. Comm.
FG 454 Mgmt. Game Fish	Fall	2	5	3	45	-	-	
Z 571 Ichythology	Fall	3	5	3	5	-	-	
FG 405 R & C	Fall	2	1		1	-	-	
FG 275 Econ. Ich.	Winter	2	3	3	20	-	-	
FG 455 Mgmt. Game Fish	Winter	2	2	2	33	-	-	
Z 572 Ichthyology	Winter	3	5	3	6	-	-	
FG 505 R & C	Winter	2	1		1	1	-	
FG 405 R & C	Winter	2	1		1	-	-	
		1	1		1	-	-	
FG 503 Thesis	Winter	3	1		1	-	-	
		2	1		1	-	-	
FG 276 Econ. Ichthyology	Spring	2	3	3	22	-	-	
FG 456 Mgmt. Game Fish	Spring	2	2	2	37	-	-	
Z 573 Ichthyology	Spring	3	5	3	5	-	-	
FG 501 Research	Spring	3	1		1	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
C. E. Warren								
FG 503 Thesis	Fall	3	10		10	-	-	Advisor to 30 students Thesis advising to Dept. graduate students
FG 507 Seminar	Fall	1	1	1	8	-	-	
FG 567 Fish. Res. Meth.	Fall	3	4	2	10	-	-	
FG 503 Thesis	Winter	3	8		5	-	-	
FG 507 Seminar	Winter	1	1	1	9	-	-	
FG 405 R & C	Winter	3	1		1	-	-	
FG 568 Fish. Res. Methods	Winter	3	4	2	10	-	-	
FG 503 Thesis	Spring	3	8		4	-	-	
		1	3		4	-	-	
FG 507 Seminar	Spring	1	1	1	8	-	-	
FG 505 R & C	Spring	3	1		1	-	-	
		2	1		2	-	-	
FG 569 Fish. Res. Meth.	Spring	3	4	2	9	8	-	
FG 503 Thesis	*Fall	1	3		5	-	-	
FG 507 Seminar	*Fall	1	1	1	12	-	-	
FG 505 R & C	*Fall	3	1		3	-	-	
FG 567 Fish. Res. Meth.	*Fall	3	5	2	13	-	-	
H. F. Horton								
FG 310 For. Wildl. Mgmt.	Fall	3	3	3	25	-	-	Property and Supply Administrative asst. Library; Advisor to 30 students; Summer training program for 4-H students; Agric. Curr. Comm.; High School Visitation
FG 464 Comm. Fish	Fall	3	4	3	22	-	-	
FG 311 For. Wildl. Mgmt.	Winter	3	3	3	24	-	-	
FG 465 Comm. Fish.	Winter	3	4	3	19	-	-	
FG 455 Mgmt. Game Fish	Winter	1	4	2	39	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
H. F. Horton (Cont'd)								
FG 275 Econ.Ichthy.	Winter	.5	1	1	20	-	-	
FG 312 For. Wildl. Mgmt.	Spring	3	3	3	24	-	-	
FG 466 Comm. Fish.	Spring	3	4	3	20	-	-	
FG 456 Mgmt. Game Fish	Spring	1	4	2	37	-	-	
FG 310 For. Wildl. Mgmt.	*Fall	3	3	3	26	-	-	
FG 464 Comm.Fish.	*Fall	3	4	3	17	-	-	
FG 454 Mgmt. Game Fish	*Fall	3	8	5	43	-	-	
FG 405 R & C	*Fall	2	1		1	-	-	
		1	1		1	-	-	
FG 505 R & C	*Fall	1	1		1	-	-	
		3	1		1	-	-	
L. Coleman								
FG 454 Mgmt. Game Fish	Fall	1	2	1	20	-	-	
FG 274 Econ.Ichthy.	Fall	1	6	3	55	-	-	
FG 275 Econ.Ichthy.	Winter	.5	1	1	20	-	-	
FG 276 Econ.Ichthy.	Spring	1	2	1	22	(Terminated fall 1959)		
P. Doudoroff								
FG 570 Poll. Probs. in Fisheries	Winter	3	3	3	8	-	-	

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F. Food and Dairy Technology

INSTRUCTIONAL LOAD
1958-59

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
H. W. Schultz								
FDT 505 R & C	Fall	3	1	1	5	4	-	Graduate Curriculum Committee
FDT 111 Intro. Food & Dairy Tech.	Winter	3	3	3	30	-	-	
FDT 407 Seminar	Winter	1	1	1	12	-	-	
G. A. Richardson								
FDT 507 Seminar	Fall	1	1	1	8	8	-	Graduate Student Committee
FDT 505 R & C	Fall	2	2	2	2	2	-	
FDT 412 Dairy Tech.	Winter	3	5	3	16	-	-	
FDT 503 Thesis	Winter	2			1	1	-	
FDT 430 Util. of Dairy Prods.	Spring	3	3	3	8	7	1	
FDT 505 R & C	Spring	3	5	2	2	2	-	
E. M. Litwiller								
FDT 271 Insp. of Pro. Foods	Fall	2	3	1	16	-	-	Undergraduate Committee
FDT 423 Food Prdts. Eval.	Fall	2	6	2	18	1	-	
FDT 405 R & C	Winter	2	6	2	1	-	-	
FDT 505 R & C	Winter	4	6	3	1	1	-	
FDT 421 Fed. & State Food Reg.	Spring	3	3	3	25	-	-	
FDT 271 Insp. of Proc. Fds	Spring	2	3	1	15	-	-	

Instructional Load (Cont'd)

Instructor Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
R. F Cain								
FDT 503 Thesis	Fall	3			2	2	-	Research Coordinator, Grad. Student Comm.
FDT 503 Thesis	Fall	1			1	1	-	
FDT 521 Color and Flvr. Eval.	Winter	3	5	2	6	5	-	
FDT 503 Thesis	Winter	6			1	1	-	
FDT 223 Food Mfg. Methods	Spring	2	2	2	25	-	-	
FDT 433 Heat Tsfr. in Food Mfg.	Spring	3	5	3	10	-	-	
FDT 503 Thesis	Spring	6			1	1	-	
R. O. Sinnhuber								
FDT 501 Research	Fall	3	1		1	1	-	Library, Scholarships & Awards Coor. Comm.
FDT 501 Research	Spring	3			1	1	-	
FDT 501 Research	Spring	2			1	1	-	
FDT 505 R & C	Spring	3	2	2	1	1	-	
FDT 505 R & C	Spring	2	1	1	1	1	-	
FDT 507 Seminar	Spring	1	1	1	10	10	-	
R. W. Stein								
FDT 318 Judging Dairy Products	Fall	1	1	1	5	-	-	Undergraduate Comm., Building & Equip. Maintenance, Supt. Dairy Prod. Lab
FDT 405 R & C	Fall	2	1	1	5	-	-	
FDT 501 Research	Fall	3	1		1	1	-	
FDT 411 Dry & Condensed Milk	Winter	3	5	3	8	-	1	
FDT 405 R & C	Winter	2	2	2	1	-	-	
FDT 503 Thesis	Winter	4			1	1	-	
FDT 118 Dairy Pro. Standards	Spring	1	2	2	11	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
R. W. Stein (Cont'd)								
FDT 118 Dairy Pro. Standards	Spring	1	2	2	8	-	-	
FDT 405 R & C	Spring	3	1	1	2	-	-	
FDT 401 Research	Spring	3			1	-	-	
FDT 401 Research	Spring	2			1	-	-	
C. E. Samuels								
FDT 221 Food Mfg. Methods	Fall	2	2	2	27	-	-	Undergraduate Coordinator, Undergraduate Committee, Grad. Curric. Committee, Short Courses
FDT 350 Prin. Food Preservation	Fall	4	6	3	9	-	-	
FDT 407 Seminar	Fall	1	1	1	12	-	-	
FDT 342 Food Science	Winter	4	9	3	13	-	-	
FDT 401 Research	Winter	3			1	-	-	
FDT 505 R & C	Winter	3	4	2	1	1	-	
FDT 343 Food Science	Spring	4	9	3	13	-	-	
FDT 405 R & C	Spring	1	1	1	1	-	-	
FDT 505 R & C	Spring	4	2	2	1	1	-	
H. Y. Yang								
FDT 503 Thesis	Fall	3	3		1	1	-	Scholarships & Awards Coordinating Committee
FDT 401 Research	Winter	5			1	-	-	
FDT 401 Research	Winter	3			1	-	-	
FDT 503 Thesis	Winter	2			1	1	-	
FDT 407 Seminar	Spring	1	1	1	14	-	-	
FDT 503 Thesis	Spring	3			1	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
T. Onsdorff								
FDT 221 Food Mfg. Methods	Fall	1	6	1	27	-	-	Building & Equipment Maintenance
FDT 311 Food Mfg. Plts. & Eq.	Fall	3	5	3	11	-	-	
FDT 222 Food Mfg. Methods	Winter	1	3	1	16	-	-	
FDT 222 Food Mfg. Methods	Winter	1	3	1	11	-	-	
FDT 223 Food Mfg. Methods	Spring	1	3	1	14	-	-	
FDT 223 Food Mfg. Methods	Spring	1	3	1	11	-	-	
O. J. Worthington								
FDT 523 Qlty. Cntrl Systems	Fall	3	5	3	3	2	-	
FDT 501 Research	Fall	3	1		1	1	-	
FDT 505 R & C	Fall	3	1	1	1	1	-	
FDT 507 Seminar	Winter	1	1	1	11	11	-	
J. H. Dietz								
FDT 423 Food Prdts. Eval.	Fall	2	2	2	18	1	-	Undergraduate Comm., Scholarships & Awards Coord. Comm., Food Tech Club Advisor
FDT 340 Food Industry Survey	Winter	3	3	3	19	-	-	
FDT 222 Food Mfg. Methods	Winter	2	2	2	27	-	-	
FDT 503 Thesis	Winter	3			1	1	-	
FDT 503 Thesis	Spring	3			1	1	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
E. A. Day								
FDT 407 Seminar	Winter	1	1	1	10	-	-	Grad. Curric. Comm.
FDT 405 R & C	Winter	2	1	1	1	-	-	Scholarships & Awards
FDT 505 R & C	Winter	1	1	1	1	1	-	Coordinating Comm.
J. O. Young								
FDT 417 Dairy Foods	Fall	3	3	3	5	-	-	Undergraduate Comm.,
FDT 401 Research	Fall	3	2		1	-	-	In charge of Dairy
FDT 407 Seminar	Fall	1	1	1	5	-	-	Short Courses, Co-
FDT 401 Research	Winter	6	3		2	-	-	Advisor of O.S.C. Dairy
FDT 310 Market Milk	Spring	3	5	2	7	-	1	Club
A. H. Bockian								
FDT 507 Seminar	Winter	3	3	3	1	1	-	

G. Horticulture

INSTRUCTIONAL LOAD
1958-59

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Prepara- tions	Enroll- ment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
S. B. Apple								
No classes	Fall							(1) Faculty Advisor for Landscape majors. (2) Departmental Administration of Res. Inst. Activities
No classes	Winter							
No classes	Spring							
H. Hartman								
No classes	Fall							
No classes	Winter							
Hrt 533 Fruit & Nut Prod.	Spring	4	12	4	3	-	-	
Hrt 405 R & C	Spring	2	2	2	1	-	-	
E. Hansen						1	1	
Hrt 501 Research	Fall	3	3	3	1	-	-	
Hrt 503 Thesis	Fall	1	1	1	1	-	-	
Hrt 531 Fruit Handling & Dist.	Winter	4	4	4	1	-	-	
No Classes	Spring							
Wm. A. Frazier						2	1	
No classes	Fall							(1) School of Agr. Curriculum Committee (2) Faculty advisor of vegetable crops majors.
Hrt 341 Prin. of Veg. Gardening	Winter	3	12	3	4	-	-	
Hrt 401 Research	Spring	3	3	3	1	-	-	
A. N. Roberts						3	0	
Hrt 361 Nurs. Mgt.	Fall	4	32	4	8	-	-	(1) Faculty Advisor to Gen. Agr. students (2) Sub-Committee of
Hrt 507 Seminar	Fall	1	6	1	6	-	-	
Hrt 362 Nurs. Mgt.	Winter	4	32	4	8	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
A. N. Roberts (Cont'd)								
Hrt 505 R & C	Winter	3	6	3	2	-	-	
No classes	Spring							
O. C. Compton						1	1	
No classes	Fall							
Hrt 516 Hort Plant Nutr. Prob.	Winter	4	16	4	4	-	-	
Hrt 505 R & C	Winter	3	3	3	1	-	-	
Hrt 405 R & C	Spring	3	3	3	1	-	-	
Hrt 505 R & C	Spring	2	2	2	1	-	-	
S. E. Wadsworth								
Hrt 253 Flower Arrangement	Fall	3	15	3	5	-	-	(1) 4-H Summer School
Hrt 451 Flower Shop Arrangement	Fall	3	12	3	4	-	-	(2) Asst. Advisor Hort. Club
Hrt 453 Handling & Distr. Florist Crops	Fall	3	15	3	5	-	-	(3) Faculty Advisor to Floriculture majors
Hrt 405 R & C	Fall	2	10	2	5	-	-	
Hrt 313 Grhse. Const. & Mgt.	Winter	3	15	3	5	-	-	
Hrt 352 Commercial Floriculture	Winter	2	14	2	7	-	-	
Hrt 405 R & C	Winter	3	15	3	5	-	-	
Hrt 253 Flower Arrangement	Spring	3	99	4	33	-	-	
Hrt 353 Commercial Floriculture	Spring	2	10	2	5	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
S. E. Wadsworth (Cont'd)								
Hrt 355 Herbaceous Plt. Mtls.	Spring	3	15	3	5	-	-	
Hrt 405 R & C	Spring	3	3	3	1	-	-	
Q. B. Zielinski						1	1	
Hrt 433 Systematic Pomology	Fall	4	28	4	7	-	-	(1) Counseling special foreign students (2) Supervision of Plant Materials for Res. Instruction (3) General Extension Division class
Hrt 505 R & C	Winter	3	3	3	1	-	-	
Hrt 513 Hrt. Genetics Lecture	Winter	3	3	3	1	-	-	
Hrt 413 Hrt. Plant Breeding	Spring	3	12	3	4	-	-	
L. T. Blaney						2	1	
Hrt 315 Basic Hort.	Fall	3	57	3	19	-	-	Faculty Advisor for Nursery Management majors
Hrt 317 History & Lit. of Hrt.	Winter	2	20	2	10	-	-	
Hrt 507 Seminar	Winter	1	7	1	7	-	-	
Hrt 333 Fruit & Nut Production	Spring	4	20	4	5	-	-	
Hrt 505 R & C	Spring	3	3	3	1	-	-	
Hrt 507 Seminar	Spring	1	1	1	1	-	-	
H. J. Mack								
Hrt 405 R & C	Fall	3	3	3	1	-	-	Asst. Advisor to Horticulture club.
Hrt 441 Veg. Handling & Distr.	Winter	3	36	3	12	-	-	
Hrt 401 Research	Winter	3	3	3	1	-	-	
Hrt 405 R & C	Winter	3	3	3	1	-	-	
Hrt 405 R & C	Spring	3	9	3	3	-	-	

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
J. R. Baggett								
No classes	Fall							
Hrt 341 Prin. Veg. Gardening	Winter	1	4	1	4	-	-	
No classes	Spring							
G. Crabtree								
No classes	Fall							
No classes	Winter							
Hrt 415 Spraying & Dusting & Fumigation	Spring	3	60	3	20	-	-	
Hrt 505 R & C	Spring	3	3	3	1	-	-	
H. Lagerstedt								
Hrt 111 Elements of Horticulture	Fall	3	186	6	62	-	-	(1) Faculty Advisor Hort. Club
Hrt 111 Elements of Horticulture	Winter	3	135	5	45	-	-	(2) Faculty Advisor to Pomology majors
Hrt 311 Plant Propagation	Winter	3	63	5	21	-	-	(3) 4-H Summer School
Hrt 111 Elements of Horticulture	Spring	3	111	5	37	-	-	
Elizabeth A. Cline								
Hrt 405 R & C	Fall	1	5	1	5	-	-	
Hrt 352 Commercial Floriculture	Winter	1	7	1	7	-	-	
Hrt 353 Commercial Floriculture	Spring	1	5	1	5	-	-	

H. Poultry Husbandry

INSTRUCTIONAL LOAD
1958-59

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
J. E. Parker								
P 121 Pltry. Prod. Lectures	Fall	2	2	2	25	1	1	Head of Department
P 121 Pltry. Prod. Lectures	Winter	2	2	2	36	-	-	
P 121 Pltry. Prod. Lectures	Spring	2	2	2	19	-	-	
P 431 Pltry. Plant Management	Spring	3	3	3	12	-	-	
J. A. Harper								
P 351 Turkey Mgt.	Fall	3	4	3	11	-	-	Member of sub-committee on biological sciences of Ag Curriculum Comm.
P 405 R & C (Turkey Prod.)	Fall	3	3	3	1	-	-	
P 505 R & C (Turkey Prod.)	Fall	2	2	2	2	-	-	
P. E. Bernier								
P 321 Incubation	Winter	3	4	3	7	1	1	Member of sub-committee on physical sciences of Ag. Curriculum Comm.
P 442 Pop. Genetics	Spring	3	3	3	8	-	-	
P 405 R & C (Poultry Breeding)	Spring	3	3	3	1	-	-	
G. H. Arscott								
P 411 Poultry Feeding	Fall	3	3	3	7	1	2	Member of sub-committee on introductory courses of Ag. Curriculum Comm. A.A.U.P. Students Relations Committee
P 412 Poultry Feeding (Lab)	Fall	1	2	1	3	-	-	
P 407 Seminar	Winter	1	1	1	1	-	-	
P 507 Seminar	Winter	1	1	1	2	-	-	
P 413 Poultry Nu-								

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
G. H. Arscott (Cont'd)								
trition	Spring	3	3	3	8	-	-	Advisor for General Ag. students. Faculty advisor - Alpha Zeta
P 407 Seminar	Spring	1	1	1	3	-	-	
P 507 Seminar	Spring	1	1	1	2	-	-	
W. H. McCluskey								
P 322 Brooding	Spring	3	3	3	14	-	-	Advisor for Poultry majors. Faculty advisor Poultry Club. Faculty advisor Ag. Student Council.
P 121 Lab-Pltry. Prod.	Fall	1	2	1	25	-	-	
P 121 Lab-Pltry.Pr.	Winter	1	2	1	36	-	-	
P 121 Lab-Pltry. Prod.	Spring	1	2	1	19	-	-	

I. Soils

INSTRUCTIONAL LOAD
1958-59

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
H. B. Cheney								
Sls 424 Soil Fert.	Winter	3	33	3	11	1	4	Counseling 6-8 undergraduates. Soils Club & Administration
Sls 407 Seminar	Spring	1	3	1	3	-	-	
M. D. Dawson*								
Sls 211 Soils	Fall	3	280	3	126	-	-	Counseling 20 undergraduates, Soils Club
Sls 405 R & C	Fall	2	2	1	1	-	-	
D. D. Evans								
Sls 311 Soil Water & Irrig.	Fall	3	174	3	58	5	5	Counseling 8 undergraduates, Soils Club
Sls 507 Seminar	Fall	1	4	1	4	-	-	
Sls 503 Thesis	Fall	3	15		5	-	-	
Sls 507 Seminar	Winter	1	12	1	12	-	-	
Sls 522 Soil Phys. Cond. & Plt. Growth	Spring	3	30	3	10	-	-	
Sls 503 Thesis	Spring	3	15		5	-	-	
M. E. Harward								
Sls 412 Sl. Chem.	Fall	3	24	3	8	7	1	Member of 5 committees Assisted 2 on thesis problems
Sls 513 Sl. Fer.	Fall	3	9	3	1	-	-	
Sls 501 Research	Fall	3	3		2	-	-	
Sls 503 Thesis	Fall	4	8		2	-	-	
Sls 503 Thesis	Winter	4	8		2	-	-	
Sls 501 Research	Spring	3	3		1	-	-	
Sls 503 Thesis	Spring	3	6		2	-	-	
Sls 507 Seminar	Spring	1	7	1	7	-	-	

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*See Farnsworth and Pomerening for Dawson

Instructional Load (Cont'd)

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students		Other Instructional Responsibilities
						Majors	Minors	
E. G. Knox								
Sls 503 Thesis	Fall	5	5		1	6	4	Library Committee
Sls 407 Seminar	Winter	1	4	1	4	-	-	
Sls 511 Sl. Genesis Morph. & Class.	Winter	3	66	3	22	-	-	
Sls 503 Thesis	Winter	4	4		1	-	-	
Sls 432 Sl. Survey	Spring	4	40	4	10	-	-	
Sls 503 Thesis	Spring	4	4		1	-	-	
C. T. Youngberg								
Sls 505 R & C	Fall	3	6	3	2	1	2	Chairman of the Graduate Committee
Sls 503 Thesis	Fall	7	7		1	-	-	
Sls 503 Thesis	Winter	7	7		1	-	-	
Sls 214 Forest Sls.	Spring	3	136	4	68	-	-	
G. L. Ashcroft								
Sls 421 Soil Physics	Fall	3	39	3	13	-	-	Visual Aids Committee Exhibits
Sls 422 Soil Physics Lab	Winter	2	10	2	5	-	-	
E. H. Gardner								
Sls 211 Soils	Fall	1	98	1	98	-	-	
R. A. Cattani								
Sls 212 Soils	Winter	1	22	1	22	-	-	
R. B. Farnsworth								
Sls 212 Soils	Winter	3	330	3	110	-	-	

Instructional Load (Cont'd)

Instructor Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
J. A. Pomerening Sls 314 Soil Mgt. & Conservation	Spring	4	72	4	18	-	-	
J. L. Young						2		
T. L. Jackson						3	3	

J. Veterinary Medicine

INSTRUCTIONAL LOAD
1958-59

Instructor, Course Number and Title	Term Taught	Cr.	Student Contact Hours	Number of Preparations	Enrollment in Course	Number of Grad. Students Majors	Number of Grad. Students Minors	Other Instructional Responsibilities
E. M. Dickinson								
VM 311 Anatomy & Phys. of the Fowl	Winter	3	6	4	24	-	-	
VM 355 Diseases of Game Birds	Spring	3	4	3	8	-	-	
J. N. Shaw								
VM 341 Diseases of Livestock	Fall	4	4	4	20	-	-	
VM 441 Diseases of Livestock	Fall	3	4	3	13	-	-	
VM 442 Diseases of Livestock	Winter	3	4	3	13	-	-	
VM 361 Parasitic Dis. of Dom. & Game Animals	Winter	4	6	4	24	-	-	
VM 443 Diseases of Livestock	Spring	3	4	3	14	-	-	
J. F. Bone								
VM 320 Anatomy of Dom. Animals	Fall	3	18	9	49	-	-	
VM 321 Phys. of Dom. Animals	Winter	3	8	5	34	-	-	
VM 322 Phys. of Dom. Animals	Spring	3	8	5	26	-	-	

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INSTRUCTION

The division of Agriculture at Oregon State College has long recognized that its most important function or responsibility is education. It accepts without question the philosophy of the Morrill Act and makes every effort to fulfill the intent of Congress and its author, Justin Smith Morrill, by providing students with a practical and liberal education through intellectual instruction. This pattern of education is further accentuated by a desire on the part of all instructors to fully implement the aims and objectives of Oregon State College. The ability of an individual to be an effective teacher is a paramount factor in the minds of staff members and administrators at the time individuals are being selected for employment. From that point on every effort is made to assure those employed that their performance as teachers shall receive just recognition through rank and salary advances.

A brief description and/or outline of departmental programs in this area of responsibility will provide further evidence of its importance and faculty interest.

A. Agricultural Economics

(1) Provision for improvement of instruction

a. There is a departmental library with many early volumes of journals and books but this must be supplemented by the main college library.

b. Each staff member is provided with a calculator for research when its use can be justified.

c. In 1957 a comprehensive review of the total departmental program was made by four national authorities in Agricultural Economics.

d. The staff as a unit seminars at least twice yearly on methods of testing, teaching and curriculum. Such problems are discussed frankly.

e. Only a limited amount of alumni data evaluation is done in the department. It is recognized that this phase of the program needs strengthening.

f. All instructors are encouraged to use (and generally do use) the regular student instructional appraisal forms.

g. Very little is done on staff evaluations of individual instructors except on a person-to-person basis.

h. Departmental faculty members follow the practice of always visiting with juniors and seniors for suggestions on teaching improvement and curricula changes. Many good suggestions have been received and placed in operation from these evaluations.

i. A departmental conference is held on improving instruction once a year. Thought is being given to conducting such meetings twice yearly.

j. Graduating seniors and graduates of the past five years are canvassed on evaluation of courses taught. This helps determine whether the instructor is (1) competent, and (2) taking enought time to teach a course properly.

k. Good teachers are always rewarded financially, and they are assigned the "key" courses. Most members of the staff believe that resident instruction is their most important job.

l. As a means of helping young instructors grow in competence the department starts with a program of evaluating course outlines and giving young instructors an opportunity to observe older teachers in operation.

m. The department recently made a comprehensive study of all courses taught by each instructor for the past five years. Several benefits have accrued from this study: (1) Grades varied widely for the same course taught by different instructors. When this was discussed freely, the extremes were brought into line. (2) Many courses taught by the same instructor year after year showed rather pronounced grade variation. This served as a caution sign to these teachers. (3) As a result of this study, a departmental policy to review all grade distributions in excess of 50% A's and B's was placed in effect.

n. Course outlines are prepared and circulated at least bi-annually for all regular courses. Copies are available to each member of the staff.

(2) Provisions for improving student achievement:

a. The department tries to gear the regular course program to the above-average student, with special office counselling for those students needing help who want it. A number of foreign students seek such aid and this represents substantial extra counselling load on some staff.

b. All of the members of the staff are concerned with student leadership and strive to encourage a reasonable balance of leadership and scholarship. Students are encouraged to:

   1. participate actively in the student Ag Econ Club and also in other school activities

   2. participate in the student Toastmaster's Club

   3. do special research studies which develop initiative and judgment

   4. present special papers in seminar and classes to develop confidence

B. Agricultural Engineering

(1) Provisions for improvement of instruction:

a. The department has been accredited by ECPD since 1948. There is also a yearly Federal inspection of all research projects.

b. Specific departmental efforts:

   1. Test improvement is handled by each individual instructor.

   2. Teaching appraisal and learning appraisal forms completed by the students are extensively employed to improve teaching methods and procedures. The department has excellent visual aid equipment and materials which are a great help in presenting subject matter.

   3. Improvement of the two curriculums is accomplished by the curriculum committees as previously explained.

c. Alumni files are kept up to date by periodic surveys and chance information. Alumni reaction is sought on course content and curriculum. Such reactions are most helpful.

d. Instructor evaluation is accomplished by means of instructor evaluation forms prepared by Blue Key honorary society at this institution. This evaluation is voluntary on the part of the instructor and is reviewed only by the instructor. There is no formalized departmental, school, or institutional evaluation of the teaching ability of an instructor.

e. Information from students for improvement of teaching is handled through contacts with advisors and from appraisal forms previously mentioned.

f. Improvement of teaching has been the subject of discussion at some staff meetings. The American Society of Agricultural Engineers held a symposium on teaching some years ago. The staff was represented and a report on proceedings was made at a staff meeting.

g. There is no departmental, school, or institutional method or system available for determining instructional competence of a staff member.

h. In the schools of Engineering and Science, the Carter Award is given annually for outstanding teaching. During the current school year four instructors were recipients of awards for meritorious and outstanding teaching at the institutional level.

i. Assisting young staff members to grow in instructional competence has been largely a personal or between-staff-member proposition. There is no formalized program within the department for assisting either the young or older staff members.

j. No studies have been made at the departmental level on teaching procedures, examination, marks, or other problems relating to improvement of instruction.

k. The MTA curriculum committee has reviewed each course on the basis of content and its place in the overall curriculum. Close attention is given the course outline, methods of approach, methods of presentation, and quality of material. No significant duplication of course material is permissible.

(2) Provisions for improving student achievement:

No concerted effort has been made to adapt curriculum and instruction to varying student abilities. Something can be accomplished in this area by the student's advisor recommending electives according to the student's demonstrated abilities.

C. Dairy and Animal Husbandry

(1) Provision for improvement of instruction:

a. The department maintains a small library of scientific and technical journals and a limited number of popular periodicals.

Current issues of scientific publications and abstract journals in the fields of Dairy and Animal Science are circulated among the staff by arrangement with the College Library.

b. All of the research conducted by staff members is supported by funds administered by the Agricultural Experiment Station and is identified by a formal project title and number. Exceptions to this are projects supported by the Atomic Energy Commission, the Public Health Service and the National Science Foundation. Laboratory facilities of the department are supplemented by facilities in related departments where and when they are available. The electron microscope, the IBM equipment and the statistical laboratory are also available to staff.

c. A team of specialists from the University of Wisconsin, Cornell University and the U. S. D. A. is scheduled to make a comprehensive review of the animal breeding and physiology areas of the department January 26-29, 1960.

A team of U. S. D. A. specialists reviews the Federally-supported research program annually.

d. In the year and a half that the present head of the department has been serving, little has been done at the department level to improve tests and teaching procedures other than (1) remind the staff of the importance of effective teaching, (2) need for regular, thought-provoking tests rather than the conventional objective, true-false or multiple choice type and (3) the value of returning exam papers promptly.

New and revised syllabi of all courses have been prepared.

A standing curriculum committee has worked more than a year revising curriculum and course offerings for the 1960-61 catalog. There will be a continuing need for revision and strengthening of curricula as long as there is a department of Dairy and Animal Science.

e. Alumni files are being assembled and brought up-to-date as previously indicated. These files will be used in various ways to strengthen the department's program and to keep in close touch with the dairy and livestock industries.

f. No effort has been made to evaluate instructors (self or otherwise) during the 1958-59 school year. It has merit and will be given consideration at a later date.

g. Because the department head came to the institution in 1958, he has been reluctant to initiate any kind of staff evaluation of individuals until he became more familiar with his staff and their individual capabilities.

h. A limited use has been made of senior student suggestions and reactions to courses and curriculum for the purpose of strengthening teaching and curriculum.

Since the present department of Dairy and Animal Husbandry was formed by consolidation of two separate departments as recently as 1957, and since the department head joined the staff more recently (1958), most of the effort to date has been directed toward a study of ways and means of effecting complete consolidation of the two departments into one. Elimination of duplicate courses, consolidation of others, and complete elimination of some with new offerings in certain areas has been included in the revised curriculum. Additional work remains to be done. Attention to itmes covered by i, j, k, l, m, will follow, but have not been given major consideration as of this date.

i. Course outlines and syllabi were revised in 1958-59 and will be kept current by revisions at least every two years. These outlines are available to other members of the faculty or anyone else.

(2) Provision for improving student achievement:

a. New courses have been added to provide practical experience in some of the "arts" for students majoring in vocational agriculture education.

Optional curricula have been designed to:

1. Provide stronger science training for students planning to go beyond the B.S. degree.
2. Include business and economics courses for students interested in business and industry related to the field of dairy and animal husbandry.

Staff counselors are also making a special effort to direct students into the option best suited for their individual capabilities.

b. Greater emphasis has been given by the staff to encouragement in and direction of student participation in the two student clubs of the department, as one means of developing student leadership.

D. Farm Crops

(1) Provision for improvement of instruction:

a. Special departmental library facilities are deficient and better facilities should be made available.

b. There are some special laboratory facilities available for faculty research. This needs to be expanded.

c. Specialists from outside the institution have been brought in to a limited degree to evaluate program of work. (Dr. H. K. Hayes and Dr. Ralph Davis)

d. An effort is made by the department to improve tests, teaching methods, procedures and curricula. This is accomplished by special committees to study curricula; some minor experiments have been carried out to test teaching methods. More of this work should be done. An attempt has been made to provide better facilities by starting a special crop nursery for more effective teaching of crop production.

e. No extensive attempt has been made to assemble and use alumni data.

f. Instructors informally make self evaluations.

g. No formal approach has been taken for staff evaluation of individuals.

h. Many staff use the blue key evaluation forms completed by students.

i. Staff have participated in college conferences for the improvement of instruction and reported back to the Resident Instruction Staff with ensuing and profitable discussion.

j. Recognition is given for competence in instruction by both salary improvement and advancement in rank.

k. A definite program is set up to have senior staff work with junior staff to aid them to grow in competence. This has not been expanded nearly as far as it might. No definite program has been designed to aid older instructors in a similar manner.

l. Considerable study has been made on various procedures which might be more effective in teaching both in laboratory and recitation. The use of the greenhouse and the field nursery has been given a great deal of thought as a teaching aid.

m. Most instructors develop course outlines and these are available to other faculty in order that they might acquaint themselves with the nature of material being covered. However, no formal program has been adopted whereby a regular exchange of such materials may be made between regular faculty members.

(2) Provisions for improving student achievement:

a. The department is constantly working towards developing curricula that would better meet the needs of the various students. Currently a good example is the development of a curriculum in seed science to meet an entirely new area of demand which heretofore has not been needed on a very extensive scale.

b. In order to provide an opportunity for leadership in this particular subject matter area, active student clubs (Farm Crops and Agronomy) are sponsored and participated in by many of the staff members.

E. Fish and Game Management

(1) Provisions for improvement of instruction:

a. At least four private libraries are available to faculty research personnel in addition to the department library.

b. Special laboratory facilities are available to faculty research personnel at two field stations in Corvallis and at a marine station in Newport, Oregon.

c. The Department of Fish and Game Management cooperates with several state and federal agencies in its research and teaching programs. In this way contact with specialists outside the institution is maintained and their constructive criticisms are encouraged and welcomed.

d. Specific departmental efforts:

Through contacts with department alumni and during senior seminars, the department head keeps informed of any deficiencies in the department's teaching efforts. When such inadequacies occur, appropriate remedial measures are taken as deemed necessary. Some staff members have taken specific education courses to improve teaching methods and procedures.

e. As outlined previously, data obtained from questionnaires circulated among alumni have been analyzed and information obtained incorporated into the resident instruction program.

f. Instructors do, from time to time, utilize the Teaching Evaluation Forms furnished by the College for this purpose.

g. The staff has never been called upon to evaluate other instructors once they have been hired. The department head continually evaluates staff members in the routine course of his duties. Staff members are continually called upon to evaluate students -- both undergraduate and graduate.

h. As part of the senior seminar, students are asked to critically review the entire curriculum of the department. Their suggestions are utilized in effecting course changes, additions and deletions. Chronic complaints regarding instruction are used to improve the level of teaching where regarded as advisable.

i. Methods for improvement of instruction are discussed during staff meetings and by department head with individual staff members.

j. Department head gains awareness of competence of instruction by personal observations, evaluation of students in senior and graduate seminars and on the job competence of departmental graduates.

k. The department head makes recommendations to the dean for promotions and salary increases based on competence of instruction, tenure, interest in students, cooperativeness, etc.

l. Because of the closeness of the staff, formal programs at the departmental level for the improvement of instructors are seldom deemed necessary. New and inexperienced instructors find older staff members available at all times to help them in any manner desirable. Exchange of ideas between staff members is a continual process and not one relegated to formal conferences.

m. Results of the graduate examination, student and alumni questionnaires have been reported previously.

Additional efforts along this line have not been made as a formal department effort.

n. Course outlines used within the department are generally mimeographed and copies distributed among staff members as well as students enrolled in the particular classes. Because this is an ever changing field, frequent revisions of course materials are necessitated and accomplished by staff members, often with the help of students.

(2) Provisions for improving student achievement.

a. Generally speaking, course requirements are standardized for all students. However, numerous Research and Reading and Conference courses are offered for those students showing unusual ability or interests. In some instances, additional specialized work is incorporated into routine coursework for exceptional students.

b. The faculty is deeply concerned with promoting and developing student leadership in the department. Students are encouraged to take an active interest in the Fin and Antler Club and in preparing the student paper "News and Views". Scholarships are awarded on the basis of leadership, grade point average and need. Students are encouraged to express themselves in seminars and other course work. Active participation in other campus activities is greatly encouraged for all students.

F. Food and Dairy Technology

(1) Provision for improvement of instruction:

a. A small department library is available for the faculty.

b. Excellent laboratory and pilot plant facilities are available for faculty research.

c. Specialists from outside the institution have not been brought to Oregon State College to evaluate the department's programs in detail. Specialists have been guests and have made only general comments. However, the department head and others have had frequent visits with people from other institutions regarding curriculum and teaching.

d. Specific departmental efforts:

1. No specific departmental efforts have been made to improve tests.

2. No specific departmental efforts have been made to improve teaching methods and procedures other than by changing teaching personnel.

3. The undergraduate courses in Food Technology were completely revised for the 1957-58 school year and Dairy Technology for the 1959-60 school year. Graduate courses are now under study.

e. A summary of alumni data was organized in 1955 which was used to aid the study made by committees on the departmental curricula.

f. The department encourages the staff to make use of the Oregon State teaching appraisal forms and the learning appraisal forms.

g. No organized attempt is made for staff evaluations of individuals, except that new graduate faculty members are recommended after approval by the department's graduate faculty.

h. No organized attempt is made (see f above) to collect information from students for improvement of teaching. However, information has been collected from students with respect to curricula. This was done in the undergraduate seminar in 1955.

i. Departmental conferences have not been held on the improvement of instruction.

j. Competence in teaching is estimated principally through judgment of past performance in relation to interest, diligence, response to suggestions, student attitudes, and knowledge of subject matter.

k. Competence is rewarded by merit salary increases, advances in rank, and informing the Dean.

l. Older persons have had their assignments reduced. Younger ones are given encouragement by praising their work. No specific program is in use to demonstrate effective methods, etc. Some have enrolled in courses in college teaching at the suggestion of the department head.

m. The only studies of grades, etc., have been based on data received each term from the Dean's Office and the Registrar.

n. Attempts are made to make course outlines available to other members of the faculty but it is very difficult to keep such outlines current. Outlines of all courses, brought up-to-date within the last four years are in a separate book in the department office and are accessible to all staff members.

(2) Provisions for improving student achievement:

a. It is felt that our departmental enrollment is too low to make any formal curriculum changes according to different student abilities; however, the departmental student advisors encourage the students with apparent greater abilities to take advanced courses as their electives.

b. The department encourages students to develop leadership by having a student club and a project whereby the students produce and sell apple juice. This money is used to publish a senior brochure which is sent to potential employers. Students are also encouraged to participate in campus activities.

G. Horticulture

(1) Provision for improvement of instruction:

a. Special research laboratory facilities include:

1. Post harvest physiology research laboratory.

2. Plant nutrition and analysis laboratories.

3. Research laboratory for plant anatomy, morphology, histology, cytogenetics research on horticultural crops.

4. Chemical laboratories including tracer technique laboratory.

5. Field laboratories - at the two research and resident instruction farms.

6. Several small research laboratories for routine research analyses, etc.

b. To date no specialists from outside the institution have been "brought'in" to evaluate programs. Individual staff members consult other specialists for ideas, suggestions, etc., at national and regional meetings and when periodically visiting other institutions.

c. Specific departmental efforts:

1. The responsibility for improving tests lies with individual instructors.

2. Improvement of teaching methods and procedures has been facilitated by recent purchases of projectors, screens, balopticon to improve visual aide facilities. Gradual acquiring of student microscopes for class work. Review by the staff of adequacy of facilities for production of plant materials. Acquisition of greenhouse equipment (mist propagators, automatic controls).

3. All curricula have been under periodic review for the past 16-18 months with ultimate revision of curricula, departmental course offerings, and course content in mind if deemed advisable.

e. Assembling and use of alumni data have been recently accomplished on a School basis but not specifically at the departmental level.

f. Several of the department's instructors have periodic formal student evaluations made.

g. No formal staff evaluations of individuals. Informal discussions occasionally develop.

h. Frequent conferences and discussions are conducted on course content of individual courses, relation of subject matter of individual courses to each other, methods of handling class laboratories, visual aid facilities.

i. No specific system or method is used in determining instructional competence. Student attitude and opinion, direct or indirect, observations and opinions of staff itself provide information for evaluation.

j. Advancement in salary and rank serves as a recognition of competence in instruction.

k. Department head, through periodic personal conferences with young instructors, recommends advanced graduate work in specific fields, sources of information, ideas in regard to course content, laboratory procedures.

As far as older instructors are concerned, every effort is made to determine specific teaching responsibilities best suited to the individual. Older instructors encour aged to review their course responsibilities in regard to content, laboratory procedures, adequacy.

Both younger and older instructors are encouraged to visit other institutions to consult with other staff members on methods of handling certain courses.

l. Department head has worked with instructors responsible for introductory courses in evaluation of range of grades (marks). One horticulture instructor has visited a neighboring land-grant institution to observe teaching methods of certain courses. Other instructors have, on behalf of the department, obtained course and curricula data from several institutions to determine scope of course offerings.

m. In 1958 course outlines of all courses offered in this department were compiled and made available to individual staff members.

(2) Improving Student Achievement:

a. Through faculty advising and counseling, and prerequisites the department attempts to reduce differential student ability in specific courses. The individual instructor must maintain certain "standards" of course content, but there is room for leeway to offset differences in student abilities. Certain courses are offered as service courses, the student with little training and not a departmental major may take the "service course" and not the strongly developed course that the horticulture major is required to take.

Reading and Conference courses are of considerable value in this regard.

b. All members of the staff encourage active participation on the part of students in the Horticultural Club, student membership in the American Society for Horticultural Science. Seminar offerings encourage leadership particularly to graduate students. Special problems courses encourage independent thinking. Students are encouraged and regularly employed by research personnel. Such experience, association, and training is of material help in developing leadership.

H. Poultry Husbandry

(1) Provision for improvement of instruction:

a. Two poultry plants and one turkey farm with combined totals of approximately 6,000 chickens and 2,000 turkeys are available for research and teaching. Incubation lab s or facilities for both chickens and turkeys are maintained. The department also has a nutrition and a poultry biology laboratory.

b. Specific departmental effort:

1. No specific efforts to improve tests per se. Some staff members are giving tests more frequently. Purchase of Rexograph makes giving tests easier.

2. More use of visual aids. More materials for demonstrations in some classes. One instructor uses review questions as an aid to study.

3. Course in Incubation and Brooding divided into two courses - P 321. Incubation, and P 322. Brooding and Broiler Production. Courses P 322., P 341., P 351., P 421., P 431., and P 441., have been changed from a yearly to an alternate year basis.

Course offered in Poultry Housing was discontinued and AE 361., Farm Buildings added to the curriculum in its stead. The course in Poultry Feeding, which was a 4 hour course, has been divided into one 3-hour lecture course and a 1-hour laboratory course. During the past two years three new courses- P 413. Poultry Nutrition; P 442. Population Genetics; and P 451. Commercial Practices have been added to the curriculum. Offering certain other courses on an alternate-year basis has made this possible without increasing the staff.

c. List of alumni with last known addresses is kept. Letters from the department inviting certain alumni (usually those residing near-by) to attend annual Ag Banquet. Occasional letters to certain alumni advising them of job opportunities.

d. There is no formal procedure followed for the evaluation of individual instructors.

e. Students (usually the better ones) are often asked by instructor for their comments on the course and suggestions for improvement. Some instructors ask for suggestions for improvement on the final examination. Members of the staff have obtained some interesting and valuable help in this way.

f. No formal but many informal departmental conferences are held on improvement of instruction.

g. Instructional competence is determined by:

    1. Discussions between individual and department head relative to course material.

    2. Course outlines.

    3. Unsolicited comments by students and alumni.

h. Recognition is given competence in instruction by promotions in rank and/or salary.

i. New instructors are invited to audit courses taught by more experienced instructors - particularly those courses in which they may teach a portion. Example: Instructor for Lab in P 121. is requested to audit the lectures the first term he is on duty. There is no program to assist the older instructors.

j. Course outlines of all courses are available to members of the department as well as members of other departments. Course outlines of all courses were revised in 1958.

(2) Provisions for improving student achievement:

a. In the Poultry curriculum there are 19 hours of electives in the junior year and 33 hours in the senior year. This enables the student and his advisor considerable opportunity to "tailor" a curriculum to the student's individual ability and desires.

In some of the courses certain prerequisites have been dropped. In more advanced courses those prerequisites must be met.

b. As a means of developing student leadership in the department:

    1. Members of the faculty sponsor an active Poultry Science Club.

    2. Some poultry majors are employed by the department. This enables students to earn part of their expenses and to learn how to work with others.

    3. Some of the better students are encouraged to take graduate work. Two of the department staff are examples of this.

I. Soils

(1) Provision for improvement of instruction:

a. Library facilities are designed for soils research as well as teaching. Major attention of the Library Committee in the department has been directed to improving the collection of publications in the OSC Library dealing with soils and related topics. A small duplicate collection of soils publications is maintained in the department.

b. Research conducted as a part of the agricultural experiment station program is one of the primary purposes of this department. Laboratory space is available for faculty and graduate student research. Neither the undergraduate nor the graduate teaching program could be conducted satisfactorily without the availability of the research program. The research program provides many things for resident instruction including facilities, opportunities for maintenance of high calibre staff, ideas and information.

c. No formal use of specialists from outside the institution to evaluate the departmental program has been made. However, a particularly experienced and competent teacher was selected to replace a staff member now on leave at Kasetsart University. This was done not only to provide highly competent instruction in the courses he is teaching but also to provide stimulus and outside evaluation that he can contribute to the overall teaching and research efforts of the department.

d. Departmental teaching and curriculum committee have been active for four years giving special consideration to teaching goals, teaching methods and revision of course offerings and curriculum. Two special series of luncheon seminars were held. Major attention has been given to curricula, course offerings and teaching methods. Considerable progress has been made in developing specific course objectives and outlines and in the use of visual aids. Most of this has been accomplished by individual staff effort but it has been stimulated by the teaching and curriculum committee and the visual aids committee.

e. For the past four years alumni have been contacted through the Soils Club Newsletter called Loess Auger. Notes from alumni as well as short papers have been included in the Newsletter.

f. Most instructors have used the evaluation forms provided by the college committee or have developed forms of their own design for student's evaluation of their teaching.

g. Formal staff evaluation of individuals' teaching efforts is not followed.

h. Both undergraduate and graduate students are solicited informally and occasionally in meetings to obtain their suggestions on improvement of teaching, curriculum, etc.

i. Departmental teaching and curriculum committee as well as the total staff held regular discussions related to the improvement of teaching about two years ago.

j. No fixed system is used in determining instructional competence of faculty staff members. Some of the guides that are used include contributions to discussions in staff meetings and otherwise, review of course objectives and outline, comments of students and staff, review of teaching materials, examinations, etc. It is recognized that these methods are far from adequate and suggestions for objective improvement will be welcome.

Other criteria are available for evaluating individual staff members' competence in counselling and directing graduate students. These include discussions with individual staff and graduate students, presentation of student thesis research outlines, development of course programs, the thesis itself, and conduct of staff and students in final or preliminary examinations.

k. Competence in instruction and competence in research and other activities are given equal consideration depending upon the nature of the assignment in developing recommendations for salary and rank changes.

l. No specific program is followed in assisting either young or older instructors to grow in competence except as previously indicated. Insofar as possible an attempt is made to develop an atmosphere of emphasizing excellence in both teaching and research. The one teaching assistant or fellow in the department is given more specific training and encouragement through direction and counsel of an experienced staff member.

m. No departmental studies have been made of teaching procedures, examinations, marks and similar problems relating to improvement of instruction. However, the staff member responsible for the introductory soils course has made a number of special studies with his own classes. Similarly, some other members of the staff have and are making special studies of their own on the effectiveness of examination and other problems.

n. Course outlines and objectives of all courses in the department were duplicated and distributed to all members of the Department of Soils staff as well as department heads in other departments in the School of Agriculture last year. Many of the instructors prepare new outlines each time the course is taught. Provision needs to be made for periodically re-duplicating current course outlines and making them available to all members of the staff.

(2) Provisions for improving student achievement:

a. Staff members in the Department of Soils clearly recognize the wide range of abilities, goals and objectives of students majoring in Soils. Although only a general soils curriculum is included in the college catalog, a second technical soils curriculum has been developed. This curriculum is designed particularly to challenge the more capable student, many of whom will be preparing for graduate work. Counselors attempt to help the student identify his own range of abilities, interests and goals and assist him in planning a program to best suit his own needs. Reducing the number of required courses in Soils and increasing the number of electives have permitted sufficient flexibility in most students' programs to permit them to select courses that will lead them in several directions depending upon their goals and abilities. The Department of Soils staff is enthusiastically supporting the School of Agriculture curriculum committee in their efforts to improve curricula throughout the School. Counselling within the department for several years has directed the students in the direction of the three major areas currently being considered by the School of Agriculture committee.

b. The Department of Soils staff and especially the individual teaching the introductory soils courses and the department head have continuously been concerned with promoting and developing student leadership and growth through activities that supplement classroom teaching. Undergraduate students have their own Soils Club and cooperatively with the Farm Crops Club constitute the student section of the American Society of Agronomy which is affiliated with the National American Society of Agronomy. The club has elected officers and carries on several activities and projects throughout the year. In addition to regular club meetings of their own, they meet once a quarter as the student section of American Society of Agronomy. Some examples of their activities or projects are as follows: In cooperation with the staff they prepare and publish a large scale newsletter entitled Loess Auger for alumni, staff, students and others. As a fund raising project they assemble and sell soil pH test kits. During the fall they cooperate with the staff in conducting an informal barbeque. In the spring they normally take a Soils Club tour of several days. They assist in conducting soil judging contests for Vocational Ag. students during the spring School of Agriculture activity. They have membership on the Agricultural Executive Council and assist this organization with overall School of Agriculture activities.

   In addition to Soils Club activities an effort is made through Soils 407, Seminar, to broaden the thinking of undergraduate Soils majors. They are also given an opportunity to get experience in preparing and presenting material both orally and written. Some of the topics that have been covered in Soils 407, Seminar, recently include:

   1. Origin, Development and Productivity of Willamette Valley Soils

   2. Review of Soil Science Journals

3. Review of the History of Nitrogen Fertilizer

4. Objectives of a College Curriculum

5. Organization of U. S. D. A.

6. Preparation of a Soils exhibit

7. Prepare and present orally two articles from Advances in Agronomy

J. Veterinary Medicine

Each staff member has laboratory space for research and when needed, outdoor facilities for animals that are used in research projects. A special laboratory facility for use by all staff members is the tissue laboratory where tissue sections are prepared and stained according to the request of the investigator. Tissues are prepared for histopathological study of diseased tissue-for-demonstration in classes, for research projects, and for aid in diagnosis of livestock and poultry diseases.

Although no special program of inviting outside specialists for lectures is in effect, the department takes advantage of research visitors and invites them to meet all departmental staff and to appear before classes whenever it can be worked into the schedule.

No formally designed program has been adopted or used in the department for improvement of instruction. Conferences have been held with teaching staff to discuss such subjects as the use of tests, and the types of tests most suitable for the courses offered. Teaching methods and aids in instruction are frequently discussed on an informal basis between teaching staff. These discussions have led to the purchase and use of models and visual aids for illustration purposes.

The department has no alumni since the courses offered are minor service courses for students majoring in other departments. Instructor efficiency and student evaluation are dependent on reports from the staffs in other departments and the reports from alumni who have majored in other departments.

There have been no formal studies made on teaching methods and procedures in the department. After consultation with staff members in other departments a reorganization of courses were presented for approval by the staff in Dairy and Animal Husbandry and Fish and Game Management before they were submitted to the curriculum committee. These reorganized courses have been approved and will be offered in the 1960-61 catalog. Syllabi are available in the department office of all courses offered. Copies of these syllabi have been sent to the Dean of Agriculture office and to the Department heads of Dairy and Animal Husbandry and Fish and Game Management. Others who may be interested in this material are welcome to this information.

Observations through many years of presenting these service courses have indicated they have been well received and appreciated by the students. Many students have indicated a desire for more course work in diseases. It should be understood that Oregon State College does not train veterinarians. The course offerings are directed toward giving students in animal production, particularly, a better understanding of the anatomy and physiology of domestic livestock, and birds and a basis for understanding underlying principles concerned with hygiene and sanitation in disease control.

Scholastic Comparison of Agricultural Students

The ensuing table will provide the reader with some evidence on how students enrolled in agriculture compare in demonstrated scholastic ability to those enrolled in all schools that make up Oregon State College.

Year		Grade Point Average Oregon State	Grade Point Average School of Agriculture
1956-57	Fall	2.53	2.46
	Winter	2.56	2.50
	Spring	2.63	2.55
1957-58	Fall	2.52	2.40
	Winter	2.57	2.47
	Spring	2.66	2.56
1958-59	Fall	2.53	2.39
	Winter	2.58	2.50
	Spring	2.67	2.58

Disciplinary Measures Employed for Poor Academic Performance

During the 1958-59 school year 66 students, 9.24%, in the School of Agriculture, were suspended because of poor scholastic performance.

Two hundred eighty-two students, 29.5%, were on probation some time during the school year. One hundred twenty-nine gained releases from progation, having brought their accumulated grade point averages up to 2.00 or better, leaving at the end of the 1958-59 school year 153, 21.4%, students on probation.

Any student receiving less than a 2.00, for a term or accumulated average, is placed on probation. Release is granted only when the 2.00 has been attained. Students are considered for suspension when they are 12 or more grade points deficient of the "c" average, or 2.00.

The School of Agriculture does not have the responsibility of suspensions, or placing students on probation. This is done by an institutional committee, The Academic Deficiencies Committee (for details on this committee, see report of The Personnel Coordinator.)

Students on probation are denied the privilege of holding any student body office, and/or committee assignments. Advisors are charged with the responsibility of seeking the cause of poor scholastic performance, and steps are taken to correct and adjust schedules.

Promotion of Student Leadership

The School of Agriculture has always been aware of the value of leadership among its students. For those students with satisfactory academic standing every encouragement is given them to participate in activities within the School of Agriculture, and the campus as a whole.

Active participation in departmental clubs is strongly advocated. The office of the Dean appoints staff members to act as advisors to clubs and honoraries.

Each year one or more Ag students are elected to Blue Key, an all-campus service honorary. Three of the women students in agriculture have been elected to Mortar Board, a women's service honorary.

The School of Agriculture has more than furnished its proportionate number of student body presidents. As an example, it may be pointed out that an agricultural student has served as president of the OSC student body during the following academic years: 1937-38; 1938-39; 1940-41; 1941-42; 1942-43; 1944-45; 1954-55; 1956-57; 1958-59.

It may also be of interest to note that the present consitution of the OSC Student Body was written by a committee headed by an Ag student.

ADMINISTRATION

Selection of Administrative Personnel

The pattern followed by the Dean and Director of the division of Agriculture in selecting new associates and departmental heads is essentially the same as that used by departments in nominating new personnel for vacancies. When a department head is to be named, the entire faculty membership within the department concerned participates in the location of acceptable individuals for the position. Open departmental discussions pertaining to prospective candidates are conducted by the Dean and Director and decisions are made through use of written secret ballots. Associates and assistants in the Dean and Director's office are nominated only after discussions are held with heads of all departments and the President of Oregon State College. Again, the final decision on an appointment rests with the Chancellor and the Oregon State Board of Higher Education.

Period of Appointments

All appointments to administrative positions are for an indefinite period of time. The selected individual holds the position in so long as his or her performance is acceptable to all parties concerned. Unsatisfactory performance would call for a replacement along the same pattern followed for extension, teaching, and research personnel. To date there has been no occasion for such a replacement.

THE STUDENTS

Enrollment figures for the School of Agriculture are shown in a preceding section of this report. The number of baccalaureate and graduate degrees granted to students majoring in departments within the School of Agriculture during the past three years are:

Degrees Granted, School of Agriculture Curricula

	1957			1958			1959		
	BS	MS	PhD	BS	MS	PhD	BS	MS	PhD
Agri. Engineering (M.T.A.)	8			8			16		
Agri. Economics	4	7	2	9	8		15	4	1
Agri. Education	12			16	5		17	6	
Dairy and Animal Husbandry	20		2	14	4		18	3	3
Farm Crops	3	2	2	5	2	3	8	5	
Fish and Game Management	34	6		37	11		44	10	
Food and Dairy Technology	20	6	1	12	3	1	21	3	2
Pomology and Vegetable Crops	4	1	2	3			7		1
Landscape - Floriculture - Nursery Management	12			10	1	1	7		
Poultry	3			1			3		
Range Management	3				1		3		
Soils	4	3		5	6	3	5	5	
General Agriculture	13	4		12			14		
Genetics		2	1			3		1	4
TOTALS	138	31	10	132	41	11	178	37	11

Student Orientation

Up to this point the School of Agriculture has not conducted an extensive orientation program for students enrolling in the school. The nearest approach that has been made to this problem is to assemble all new students at the outset of each fall term and devote the equivalent of approximately one-half day to a review of course offerings and opportunities. Student counseling, per se, is the responsibility of individual faculty members to whom each student is assigned. Such guidance and assistance is based upon results of placement tests and all available scholastic records. In addition to this assistance, students in agriculture have access at all times to a full time faculty member on the Dean and Director's staff trained in personnel work.

Student Loan Funds

Loan funds restricted to students in Agriculture amount to $1,650.00. This is a fund established by the Oregon Feed and Seed Dealers association, and is being increased each year by $400 or more. It is the intention of the Association to build this fund up to ten or twelve thousand dollars. The fund is administered by the Oregon State College Loan Fund, Inc.

Other funds are available to students in agriculture, including loans under the National Defense Act of 1958 and the OSC Student Loan Fund, which is a large revolving trust fund that is established for the purpose of lending money to worthy students enrolled in any school on the campus.

The Student Loan Fund Committee has information on many loan funds administered by other agencies, and reference is made to them when requests come in that cannot be handled by the OSC Loan Fund.

For further information on Student Loan Funds see the report from the Office of the Registrar.

Placement of Graduates

The extent to which the School of Agriculture accepts responsibility for placement of its graduates is presented in detail under the section entitled "Records and Reports".

CONCLUSION

The enrollment of undergraduate students in the School of Agriculture during the four-year period 1954-55 through 1958-59 varied only between 720 and 714. In contrast to this very uniform undergraduate enrollment the 1959-60 enrollment was lower by 92 students. There were only 8 fewer freshmen. The larger part of the drop in enrollment was accounted for by students not returning for their sophomore, junior and senior years. This is an unprecedented occurrence and is being studied.

During the same recent five-year period our graduate enrollment in agriculture has increased from 104 to 120.

The recent consolidation of the three departments of Dairy Husbandry (including dairy manufacturing), Animal Husbandry and Food Technology into Dairy and Animal Husbandry and Food and Dairy Technology is resulting in consolidations and reductions of course offerings, more effective use of funds and the staff, and better program planning. The staff have cooperated in an excellent manner in effecting changes which are necessary in such a consolidation.

The School of Agriculture has been particularly fortunate in having excellent new facilities provided in recent years. These include a new Food Technology building, a Dairy and Animal Husbandry building, and the first unit of Cordley Hall which houses Horticulture, Botany-Plant Pathology and Entomology.

The pressing need now is for a new Agricultural Engineering building. This would permit the Fish and Game Department to move to the present Agricultural Engineering building. The departments of Agricultural Economics and Statistics could then expand into the area presently occupied by Fish and Game. Additional space would also be available to the Extension Service. Construction of this one building would relieve a crowded situation in five major departments.

Second in priority of needs for expanded or new facilities would be provisions of space for the Departments of Soils and Farm Crops. Both departments are presently scheduled to move to the third unit of Cordley Hall when completed. Administrative office and facilities for the School of Agriculture and Agricultural Experiment Station are also projected in plans for this unit.

Coordination and cooperation between schools on the campus appear to be excellent. Examples of this relationship will be found between and among the Schools of Forestry, Engineering, Business and Technology, Science, Education and Agriculture.

Range Management research and teaching are in Agriculture. These arrangements are operating with the full approval of the Schools of Forestry and Agriculture. Forestry students take their course work in

Range Management in Agriculture. Course work in Farm Forestry is taught in the School of Forestry only. During the past two years the Forest Experiment Station became a division of the Agricultural Experiment Station at the request of the Dean of Forestry.

The Agricultural Engineering Department is jointly administered by the Deans of Agriculture and Engineering, as explained in the Agricultural Engineering section of this report, which is most satisfactory to Agriculture.

The School of Agriculture offers minors for students majoring in Business and Technology which are jointly planned.

The cooperation and coordination between the resident staff in Agriculture and Extension are good. Extension Specialists are selected on the recommendation of Department Heads concerned and with the approval of Extension Administration. Such personnel are officed with their subject matter departments. If questions should arise relative to subject matter recommendations, the recommendations of the resident department take precedent.